ON

MOTION IN PLANTS AND ANIMALS.

A Discourse delivered at the Royal Institution of Great Britain,

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(Concluded from p. 82.)

BUT to return from these digressions to the subject of vital contractility. A substance presenting no structure or any definite form whatever may yet possess this property. In the simplest forms of life the entire being is composed of a shapeless and structureless substance, which has been termed sarcode. Nay more, even separated fragments of this simple contractile substance are also capable of active contraction.

Now, it is true that the term muscle is not commonly applied to all these forms of contractile substance. It is usually restricted to those varieties which assume a definite shape and appear as fibres. But an extended examination of the various forms of contractile substance which occur in the animal kingdom will show that this distinction, although perhaps better than any other, and sufficient for ordinary purposes, is nevertheless an arbitrary one, and cannot be applied in all cases. The several forms of contractile substance pass so insensibly into each other that it is not practicable to point out when or where distinct and isolated fibres first appear. Even those who insist upon the distinction are compelled to admit the existence of transitional forms;* so numerous and gradual are the changes by which special parts—fully-formed muscular fibres, arise out of the general structure—amorphous contractile substance. It is at least clear that the various structures commonly called muscles are not connected by any physiological characters which distinguish them from other forms of contractile tissue. We can but say of the muscles commonly so called, as of all forms of contractile tissue, that they are distinguished only by the possession of a peculiar power.

And from this point of view we may regard the nature of ciliary movement. The motion of cilia may be considered to depend upon the same power. Cilia may be regarded simply as a variety of contractile tissue. Nothing is known of the nature of ciliary action which should lead us to deny to these structures the possession of this power, seeing that it is not the attribute of any particular one, but inherent in so many and such various forms of tissue. This view is not opposed to any of the facts connected with this remarkable movement; on the contrary, it is supported by the principal ones, and no other view of its nature has been rendered even probable.†

But a structure endowed with vital contractility is not peculiar to the animal kingdom. Although much more restricted in its occurrence and extent, in the degree to which it is developed, and proportionately in its power of action, and never, so far as we know, appearing in the form of striated fibre in the vegetable kingdom, yet a tissue possessing vital contractility is found in plants. A substance endowed with this power occurs in the vegetable kingdom which in structure and function cannot be distinguished from the simplest forms of animal contractile tissue.

The substance called protoplasm exhibits changes of form and other movements which cannot be explained by any physical property or by any extraneous influences. These movements are most remarkably shown at times in the spaces of young cellular tissue. The movement termed rotation or gyration, and which is often seen in the contents of young cells, such as those of the leaves of Nitella, Vallisneria, Anacharis, and other instances, or sometimes in hairs, as in those of the spider wort (Tradescantia Virginica) and potato (Solanum tuberosum), or sometimes in other parts of plants, may depend upon the contractility of protoplasm.‡ These movements, which in some form or other are probably of general occurrence, are said by those who have studied them to present a close resemblance to those of Amœba and its allies. No one has yet shown a distinction of importance between protoplasm of the vegetable, and sarcode of the animal kingdom. So far as we know, the physical characters, structure, composition, and properties of the substance are identical, whether it be obtained from animals or plants.

But let us pass on to consider other movements in plants the cause of which is less equivocal.

The remarkable motion witnessed in those simple forms of vegetable life, the Oscillatoriæ, can only be referred to the vital contractility of their substance. There is no other explanation in the least degree satisfactory to be given of those spontaneous movements of flexion and extension, those oscillations, writhings, and spiral twistings of the delicate filaments. However much this may be affected by external influences, as by light and heat, the essential cause of the motion must be referred to an inherent property of the filament—in short, to vital contractility.

But some of the most highly organized plants—those most advanced in the vegetable kingdom, display movements which can be referred only to vital contractility of certain of their tissues. Let me allude to one or two of the best known and well marked examples.

Most people are familiar with the movements of sensitive plants—various species of Mimosa, especially M. pudica and M. sensitiva. The leaf of these plants is what is termed a compound bipinnate one, having four partial leaf-stalks proceeding from a common petiole. When the plant is in its natural state and in the light the leaflets are expanded horizontally; but when it is in darkness, or when the leaves are irritated—even touched—they fold up so that their upper surfaces come in contact, while the petiole is depressed so that the entire leaf at length hangs down. The plant, with the leaves thus folded and depressed, appears to droop. But the leaf again rises and unfolds, under the influence of light, when the irritation is removed. Under natural circumstances these alternate movements are periodically repeated daily.

Concerning the influence of stimuli on these movements, it is a remarkable fact that if any of the leaflets are touched or otherwise stimulated, although the utmost care be employed to avoid agitating others, not only will those touched become folded, but the movement will extend regularly to adjoining leaflets. It will spread in an orderly manner to the other partial petioles—it may be over the entire leaf, until the whole becomes folded and the general leaf-stalk depressed. The influence of the stimulus may extend in either or both directions along the leaflet, according as the apex or base or central portion is touched. These movements, besides alternating with the day and night, may be excited by various stimuli, by the application of heat or electricity, by various physical and chemical stimuli, even by the wind. Certain experiments seem to show that these plants may become accustomed to or exhausted by the frequent repetition of a weak stimulus. Moreover, it is a most interesting fact, not only that many poisons will destroy the power, but that this plant may be brought under the influence of chloroform. When exposed to the vapour of chloroform, the leaves soon lose the power of responding to stimuli; but if the dose be carefully adjusted and not excessive, the power gradually returns as the influence passes off.

Now, although there is the best evidence for concluding that these remarkable movements depend upon a structure endowed with vital contractility, the precise arrangement of this tissue and its manner of action have not yet been clearly and satisfactorily set forth. In Mimosa there is an evident enlargement at the base of the petiole, and similar though smaller ones at the base of the leaflets. These swellings, when touched, directly produce motion. When examined, a succulent tissue is found in the interior, the upper and under portions of which appear to differ in their properties. The lower is contractile, the upper distensible. The movement is said to depend on the contraction of the lower part, and the consequent distension of the upper part. The petiole is thus necessarily depressed. In proof of this it is stated that, if the upper portion alone of the swelling be touched, no movement ensues; but it is forthwith produced when the lower portion is stimulated. In the leaflets the arrangement is reversed. The contractile tissue is above and the other beneath, so that a movement upward is the result of their action.

Now, however unsatisfactory or incomplete this account of the minute structure and action of these remarkable enlargements may be, there cannot be a reasonable doubt that they are the seat of the movement, and that this depends on a tissue possessing vital contractility.

* Zur Lehre vom Bau und Leben der Contractiler Substanz der Niederen Thiere, von A. Ecker. Siebold and Kölliker's Zeitschrift, vol. i. p. 218.

† See Dr. Sharpey. Elements of Anatomy, pp. 77-8. 1860.

‡ See on this subject Henfrey. Elementary Course of Botany, p. 616. 1857.

Still more obscure are the means by which the influence of a local stimulus spreads regularly from portion to portion over the entire leaf.

Here is a rough sketch of a compound leaf of Robinia, which shows similar swellings in corresponding situations. It exhibits similar movements, and so, more or less, do the leaves of various other plants, principally of the orders Leguminosæ and Oxalidaceæ.

Everyone has heard of the plant called Venus's fly-trap (Dionæa muscipula). The leaves have a jointed blade, on the upper surface of each of the two lobes of which three hairs or prickles stand erect, with enlargements at their base. When these hairs are touched, or in any way irritated, the two lobes close upwards. Flies or other insects are sometimes thus found enclosed in the folded leaf, and hence the name of the plant. The leaf opens again only after the irritation has subsided, and so any imprisoned insect is held firmly in its grasp until its struggles have ceased. The closure is said to be due to some change which takes place in the leaf-stalk, as the result of any stimulus applied to one of the hairs. The nature of this action is even more obscure than in the former case.

The Sundews (Drosera) of our marshes, whose leaves, provided with viscid hairs to which insects occasionally adhere, are sometimes found folded, are said also to exhibit some degree of contractility, but this is doubtful.

A very peculiar movement is exhibited by certain tropical species of Desmodium (Hedysarum). The leaf of Desmodium gyrans is what is termed unequally pinnate, having a larger leaflet at the extremity of the stalk, and two pairs of much smaller ones placed laterally. The large terminal leaflet, besides periodical movements in a vertical direction, exhibits during the day, when it rises, peculiar lateral oscillations. At night it is depressed and motionless. In the smaller lateral leaflets a peculiar motion, often of a twitching or jerking character, constantly occurs, whereby they describe an arc forwards and backwards. The motion is effected at the articulation of the leaflet with its petiole. Each complete one is said to occupy about three minutes. These movements, although diminished, are not arrested by cold and darkness. They are most active in a bright light, warmth, and moisture. They are less affected than other movements of a similar nature by mechanical or chemical stimuli. They also continue for a longer time in separated parts.

The previous instances are examples of movements in leaves, but movements of a similar nature are produced by certain organs of the flower in some plants. By the stamens of Berberry, for a well-known instance. If the filament be touched—say with the point of a pin—at the inner portion of its base where it joins the receptacle, it immediately bends over, and the stamen touches the style. A contractile tissue exists at the spot which is touched. This contractility may be suspended by chloroform, if the blossoms are exposed to its vapour. So again, though independently of any obvious external stimulus, the five stamens of Parnassia palustris are said to bend forward over the stigma in an orderly manner; and other examples of contractile filaments and styles might be mentioned.

Occasionally movements of a similar nature have been observed in some petals and in other parts of certain flowers.

In other plants, again, certain cells appear to be contractile. Thus if, while the wild lettuce flowers, the vesicles of its leaves be touched or otherwise irritated, the milky juice which they contain exudes. Again, the poison-gland of the nettle contracts and forces out its secretion through the conical tubular hair which surmounts it, if the latter be pressed.

The movements witnessed in plants, and of which no other explanation can be given than that they depend upon some tissue endowed with vital contractility, may be thus classified:—

Movements which are spontaneous—that is to say, which are independent of any visible external influence: e. g., Oscillatoriæ; leaflets of Hedysarum.

Movements excited by the direct application of a stimulus: e. g., leaves of Dionæa muscipula; stamens of Berberry.

Movements which, affected by external influences, are naturally periodical, and independent of any local stimulus; but which are also excited directly by stimuli: e. g., leaves of Mimosa.

Now, whatever obscurity may hang over certain of their structures, let it be remarked that there is the same evidence of the nature of this vital contractility in plants as in animals. It is dependent on life, and not, like any physical property, retained so long as the structure itself is not destroyed. So, also, these movements either occur spontaneously, or may be excited by various stimuli—touch, for example. If these motions depend upon elasticity or hygroscopic changes, or any other physical cause which elsewhere operates, how could stimuli act to produce them? Moreover, they appear to be governed by the same laws that regulate their action in the animal kingdom. Their energy varies with the vigour of the plant. Excessive exercise produces exhaustion, but the power is restored during subsequent repose. This evidence, thus clear and satisfactory, receives a remarkable and most interesting confirmation from the effects produced by the vapour of chloroform.

And with reference to the nature of ciliary action, it is most interesting to observe contractile filaments on the spores and other parts of certain Cryptogamia. Indeed cilia occur almost universally in the lower plants—the Algæ.

And here I would allude to the class of movements called rhythmical. Whatever explanation be offered of the nature of rhythmical contractions, they are certainly not restricted to one class of beings or to one form of tissue. They are not peculiar to the animal kingdom. They are seen in some living forms which are generally considered to be plants. Pulsating vesicles have been observed in the spores of some of the simplest plants. For example, a rhythmically pulsating space is visible in the cell substance of the spore of Volvox, the contraction of which is sudden and rapid, whilst its dilatation is slow and gradual.

Now it would be startling to talk of the muscles of plants, but, nevertheless, we see that a structure endowed with vital contractility occurs in them. It is simply a question of the relation of the term muscle to contractile tissue. The term must either be limited to certain forms only of contractile tissue in animals,—and it may be doubted whether it be practicable even thus arbitrarily to define its application,—or it must be extended to the contractile tissue of plants. At all events it is obvious that we can draw no physiological distinction between the contractile tissue of plants and animals.

The contractile tissues of the higher animals are, indeed, capable of being excited to activity by a peculiar stimulus—the nerve-force; but this special stimulus does not exclude the operation of others, and, what is nearer to our purpose, there is no more evidence of the operation of nerve-force exciting vital contractility in the substance of the simplest animals than in plants.

After excluding from both kingdoms all those movements which are due either to extraneous causes or simply to the physical properties of a tissue, there still remains, in the vegetable as in the animal kingdom, motion which unquestionably depends on vital contractility, and this is, perhaps, the most universal attribute of living beings. While, therefore, of the so-called animal functions—motion and sensation,—the latter is restricted to a portion of the animal kingdom, the former is common to both kingdoms.

Vital movements may be arranged according to the conditions under which they naturally occur.

In the first place are those movements which occur, we say, spontaneously—independently of external stimulus. Many of these movements are remarkably regular in their occurrence—rhythmical. This kind of motion is met with in both kingdoms.

Next are those movements which, although they may occur spontaneously, are yet obviously excited by external stimuli. These are clearly seen in many plants and in the simplest animals.

Then come those movements which are commonly excited through the nervous system, and which, of course, are seen only in those animals in which a nervous system exists.

These last movements may be again classified according to the kind of reflex action through which they are excited. 1. There are movements which, although resulting from an impression on some portion of the peripheral nervous system acting through a centre, yet offer no evidence whatever that the will, or even consciousness or sensation, are involved in the act. These may therefore be termed excito motor actions. 2. There are movements of a reflex character which involve consciousness. Such are termed sensori-motor actions. 3. Lastly, there are movements in obedience to the will, and called voluntary.

They may be put thus:—

Motion
- Spontaneous, often rhythmical.
- Resulting directly from external stimuli.
- Excited through the nervous system—reflex actions.
  - Excito-motor.
  - Sensori-motor.
  - Voluntary.

In the different movements which occur in living beings examples are presented of the operation of various forces, all tending to a common result—motion. In osmose, chemical force operates. "There is a remarkably direct substitution of one of the great forces of nature by its equivalent in another

force—the conversion, as it may be said, of chemical affinity into mechanical power."* In elasticity an example is presented of a purely physical one. In muscular action a vital force appears, but even here chemical force is involved. It is now universally admitted that the amount of muscular force employed is proportionate to the amount of muscular structure consumed; so that muscular action may be measured by the products of the metamorphosis of muscular tissue.

Again, in the extension or compression of elastic tissue by muscular action and its subsequent recoil we have a clear and simple instance of the transference of force which is nevertheless still employed in effecting motion.

The study of physiology has thus especial charm. We are continually called upon to contemplate the perfect adaptation of means to ends. The knowledge we thus acquire, partial though it must be, not only tends to enlarge and elevate our thoughts and ideas, but the contemplation of that which is in its nature perfect must always afford peculiar pleasure to every rightly constituted mind. This is so even with works of art. The pleasure we derive from them is inseparably associated with the conviction that the idea they embody has been successfully carried out—that the purpose of their construction has been fulfilled. But all the works of art lie open to criticism. All the works of nature are beyond it. Absolute perfection is unknown in art. There is nothing short of it in nature. We labour to penetrate her mysteries in the full assurance of this.

How conspicuously is all this set forth in the phenomena of motion, and in the means—the mechanism by which it is accomplished in art and nature! Human intellect may point with pardonable pride to machinery in all its various forms, as trophies of its skill; to the vast power of locomotive and other engines; to the delicacy of the instruments by which time is registered with the utmost accuracy; to the wonders accomplished by calculating machines. Truly these things have ceased to astonish us only because we have become familiar with them. But of what surpassing wonders can physiology tell! We should hesitate to believe that muscles are gifted with the enormous power they possess—a power which seems to be limited only by the means through which they act—if illustrations of it were not presented daily to our observation. A host of examples crowd at once upon us. But think only for a moment of the weight which a strong man will raise in his hand by means of muscles which weigh altogether only a pound or two, and these acting at an enormous disadvantage so far as force is concerned. Powerful men can raise for about two feet a weight of 360 lbs. One man has been known to lift thus 800 lbs., and another to raise in his jaws 300 lbs.; and an instance is recorded in which the muscles of the back, even when not much developed, sustained a weight of 800 lbs. Surgeons know very well that by the power of muscles even bones are sometimes torn. Imagine, if you can, the force required to effect this. It is true that such prodigious efforts as these are only transient, and very rapidly produce exhaustion; but there are movements accomplished without any sense of effort or the least fatigue—nay, habitually without consciousness—in which, nevertheless, an enormous force is employed. From the best calculations it appears that in the ordinary act of tranquil inspiration there is, independently of the elastic force of the lungs, a resistance to be overcome equal to more than 100 lbs. To this must be added at least more than another 100 lbs. for the lungs, so that the total resistance to be overcome in inspiration is equal to more than 200 lbs. And this is accomplished from fifteen to twenty times every minute of our life. From calculations founded upon the height to which a column of mercury can be raised, it appears that the muscles of a strong man at the close of a very deep inspiration must be capable of exerting a force equal to at least 1000 lbs.† And it is not difficult to find in the animal kingdom many beautiful examples of sustained voluntary action. Take as one of the most obvious the time during which a bird will remain on the wing. The act of flying requires very considerable muscular force to work with energy upon the outstretched wings, and yet this great force is liberally supplied without cessation in some instances for many hours.‡ And in this same act of flying are to be found, perhaps, the most extraordinary illustrations of the velocity with which muscles can contract. There are many cases in which anyone may make a calculation that will lead to the most startling results. For example, in a heart which is rapidly beating muscular fibres must contract in one seventh of a second. Again, some persons can pronounce distinctly 1500 letters in a minute; this, it is calculated, must imply the contraction of muscular fibres in one-fiftieth of a second. But such marvels as these will hardly prepare us to receive the statements—which are nevertheless put forth upon good authority, and which have not hitherto been impugned—made concerning the velocity of muscular contraction in some insects. The oscillations of the wings, we know, are far too rapid to be directly numbered, and the principles of optics and acoustics have been invoked to count them. Everyone is familiar with the hum of the gnat, and it is well known too that the note of this hum varies. Now this variation is effected by the vibration of the wings, which are moved by their muscles, and the rate of vibration may be calculated from the pitch of the note produced. From such calculations, then, we are told that when the insect is in an excited state the muscles moving the wings must contract some hundreds, nay thousands, of times in a second. This is indeed inconceivable—we cannot imagine it. But however wide of the mark such statements may be, there is sufficient evidence, which everyone can appreciate as conclusive, of the marvellous velocity of contraction of these minute muscles. And need I say more of the precision of their action—of the extreme accuracy with which their force can be adjusted? Think, again, of their action on the vocal cords. Indeed, it is wonderfully illustrated—if we only think on it—not only in every word we utter, but in every touch of the pen or pencil.

Warned by time, and fearing to weary you by these allusions to, what must be to so many, familiar facts, I pause on the very threshold of these wonders. I might pass on to speak of the marvellous manner in which these great agents of motion—the muscles—are combined in their action; how numbers of them work harmoniously to a common end; and I might say something of the means by which this co-ordination is effected. These things, and others of a like nature, cannot be too well learnt, and assuredly as yet they are not widely enough known. I would try to teach them everywhere, not merely in the way of so much information, but for that better and higher purpose of education, which is not only to accumulate stores of knowledge, but also—and this rather—to cultivate the mind through the influence of the noblest truths.

HEROIC ACT OF A PHYSICIAN IN FRANCE. — The *Courrier de Nantes*, quoted by *L'Union Médicale*, states that Dr. Hulin was recently called to see a little girl, eight years old, on the point of death from croup. Two children and a servant had already fallen victims to the malady in the same family, and Dr. Hulin immediately performed tracheotomy on the nearly asphyxiated child. A considerable quantity of blood poured into the lungs immediately after the operation; breathing through the artificial opening became impossible, and the child was gasping. Regardless of the danger, the operator at once applied his mouth to the wound, and by strong inspirations freed the trachea, and saved the patient. It is to be hoped that Dr. Hulin will not suffer in consequence of this noble act of professional devotion.

MERCURY DISCOVERABLE IN THE EXCRETIONS. — Dr. Schneider has instituted a number of experiments and investigations in order to determine the question of the excretion of mercury after mercurial treatment, and has invariably found positive results. In some cases the excretion continues for three, and even six weeks afterwards. In a case in which death occurred during the mercurial treatment, mercury was found in both the liver and the brain.

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* See Graham. The Bakerian Lecture on Osmotic Force. Phil. Trans., 1854.

† See, for an account of the experiments and calculations upon which these conclusions are founded, Dr. Hutchinson's article "Thorax" in the Cyclopædia of Anatomy and Physiology.

‡ Mr. Gould, in speaking of the Australian swallow or swift (Acanthylis caudacuta), says:—"So exclusively is this bird a tenant of the air, that I never in any instance saw it perch, and but rarely sufficiently near the earth to admit of a successful shot; it is only late in the evening and during lowery weather that such an object can be accomplished. With the exception of the crane, it is certainly the most lofty as well as the most vigorous flyer of the Australian birds."

And another writer, speaking of the swift (Cypselus apus), says:—"This indefatigable bird is an early riser, and very late in returning to rest—later, indeed, than any of the diurnal birds. Though engaged in flight during the livelong day, the swift appears to be proof against fatigue, and will, during the long summer days, remain upon the wing until after nine in the evening. As the days become shorter, the swift is found to retire earlier, but during its stay in this country it is almost invariably later than other birds, sometimes being on the wing together with the owl. Indeed, the air seems to the swift even a more familiar element than the earth, and the bird is able to pass the whole of its life, and to perform all the bodily functions except those of sleep and repose, while upborne on the untiring pinions with which it is furnished. The swift that has a nest to take care of is forced to descend at intervals for the purpose of supplying its family with food; but, except when urged by such considerations, it is able to remain in the air for many successive hours without needing to rest."

Lectures
ON
SYPHILITIC INOCULATION,
AND ITS
RELATIONS TO VACCINATION.

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LECTURE VIII.

SYPHILITIC INOCULATION MODIFIED BY THE HEREDITARY TRANSMISSION OF DISEASE.

THE cases and experiments recorded in the previous lectures all go to show that the blood of syphilitic patients and the secretions derived from secondary syphilitic affections are, under certain circumstances, inoculable upon persons who have not previously had the disease. Cases and experiments which at first sight would appear to lead to a directly contrary conclusion are, however, not wanting. The following are mentioned by Dr. Sarrhos, and are reprinted by M. Fournier in the last edition of Ricord's "Leçons sur le Chancre":—

Dr. Rattier, who had never had syphilis, was inoculated several times with the secretion from all the forms of secondary symptoms, without any disease being communicated. These experiments were performed fifteen years ago.

In 1852, M. Cullerier, who had never had syphilis, inoculated himself a great number of times at the Hospital Lourcine with the secretion from secondary symptoms, and always without result.

Dr. Sarrhos himself, who had never had syphilis, was inoculated some thirty times with the secretion from several different forms of secondary disease in July, 1852. In June, 1853, he writes that he had not had any syphilitic symptom, although he had done nothing by way of treatment to prevent their occurrence. The following is an abstract of some of these experiments:—

1. Inoculation of the secretion from a secondary ecthymatous pustule on the forearm. A very slight inflammation developed itself upon the punctured spot. This completely disappeared in some days, and was followed by no other symptoms.

2. A syphilitic patient had on the upper lip a large spot of rupia. From a crack in the scab some secretion was taken, which was inoculated upon the patient, upon a physician who had had syphilis, and upon Dr. Sarrhos himself. Dr. Sarrhos with a pin inoculated himself in three places in the forearm; the punctures were made to different depths. The result was negative on the patient, on the physician who had had syphilis, and on Dr. Sarrhos who had not.

3. Dr. Sarrhos inoculated himself with the pus taken from some secondary mucous tubercles. Some redness of slight extent showed itself around the puncture. This disappeared in a few days without being followed by any other, either local or constitutional, disease.

4. The secretion from mucous tubercles was again inoculated as in the last-mentioned case. Slight inflammation, with itching, followed; but there was no suppuration, ulceration of the skin, induration on the spot, nor affection of the inguinal glands.

5. A double inoculation was performed with the secretion from a syphilitic ulcer on the tonsil, and from a specific ulcer on the leg. In both cases the result was negative.

6. Dr. Sarrhos made six punctures on his own forearm, extending to different depths, with a lancet charged with the secretion from the ulcer from which the matter was taken in the last experiment. Slight inflammation was produced; but this was probably due to the little wounds made by the lancet. A few days afterwards every symptom had disappeared.

Twenty-four other similar experiments are related with like results. Dr. Sarrhos remained free from any syphilitic symptom at the time of their publication.

These experiments, undertaken in such good faith, and carried on with so much perseverance, appear at first sight to contradict the notion that the secondary forms of disease are communicable by inoculation. But before we arrive at the conclusion that the various series of experiments which have now been referred to do indeed contradict each other, two important questions present themselves for consideration: 1st, how far the inoculability of the secretion from secondary affections, or of the blood from syphilitic patients, may be influenced by the period of the disease at which the diseased fluid is taken; and, 2ndly, how far such inoculations may be influenced by hereditary affections or predispositions on the part of the recipient.

1. Syphilis, in all its stages, becomes developed after a certain period of incubation. This is manifest after the first inoculation of the disease. After a second period of incubation the constitutional symptoms will present themselves. These may disappear, but after a certain interval they will again show themselves, in perhaps some different or modified form. The disease may thus continue for years, showing increased vitality at intervals, with longer or shorter periods of comparative inactivity.

Now, as the lymph from a vaccine vesicle would produce its natural effect much more certainly when taken at the time when its specific action had become matured, than while it was either in a nascent or a declining condition; so has the primary chancre certain periods during which its secretion is more readily inoculable than at others. Again, with regard to the secondary forms of the disease: as we find that after a period of inactivity the symptoms will reappear with fresh vigour, we may reasonably suppose that the blood would be most likely to be inoculable upon another person at that time when it is about to produce a fresh development of the disease in the infected person; and that when the secondary symptoms had recently appeared, they would be more likely to furnish an inoculable secretion than at any other period. It is important therefore to consider, in connexion with any experiments upon the inoculability of secondary syphilis, the phase of the disease at which the inoculated fluid has been taken, and the duration of the symptoms.

2. By far the most important question, however, remains,—namely, the effect of hereditary influences in preventing or modifying the actions of the inoculated fluids. If it be true that a patient is generally liable to syphilitic infection once only in his lifetime, the question presents itself with much point, in relation to our present subject, how far a person who has had syphilis by hereditary transmission is protected from any fresh attack of the same nature. Several cases have lately come under my notice in which the effects of hereditary syphilis have at intervals manifested themselves until the patients were approaching puberty; and it is more than probable that if the visible effects of the disease can remain so long in a patient's constitution, its more subtle and secret influences may continue to a much later period. It is a point of very grave moment to determine how far such an influence derived by hereditary descent has the same effect in preventing the reinoculation of syphilitic matter as it is well known that acquired syphilis has.

Whatever may have been the cause of the failure of the inoculation in cases where the products of secondary syphilitic affections have been artificially introduced into the system of those who were said not previously to have had the disease, it is obvious that one link in the chain of evidence has hitherto been wanting in those cases.

In order to be of any real value in demonstrating the non-inoculability of secondary syphilis, it would be necessary to show that the patients upon whom the experiments were made were susceptible of *primary* syphilitic inoculation. If in any case it were found that a patient showed no syphilitic symptoms after being repeatedly inoculated with the secretions from secondary syphilitic affections, and if afterwards the inoculation of the secretion from a primary infecting sore gave rise in him to an infecting chancre, then we might say that such an experiment was of some value in proving the non-inoculability of secondary disease. But until the susceptibility of a patient's constitution to syphilitic infection from *any* source is thus demonstrated, the negative evidence derived from his not being susceptible to infection from any one form of disease is of little moment. If such a mode of reasoning were admitted as is implied by the experiments mentioned in the first part of this lecture, it would be very easy to prove by the same means that primary syphilis was not inoculable.

Among those who habitually expose themselves to syphilitic infection it occurs every now and then that an individual is found who never has had the infecting form of the disease; and the question naturally arises—Why has he not suffered in the same way as others who have been similarly exposed? The answer which would generally be given to such a question

would probably be that it depended upon some peculiarity in the person's constitution. But we are bound, if possible, to ascertain and determine as far as may be what that peculiarity of constitution is. It has lately been said that such an immunity may be acquired by the repeated inoculation of the suppurating form of the disease. The fallacy of such a supposition in a theoretical point of view has already been shown in the first of the present series of lectures. The observation of cases as they occur in practice equally shows that such an idea is unfounded. It will frequently occur that a patient will have several suppurating sores in succession without any constitutional disease, and then he will contract an infecting sore just in the same way as if he had not previously had any kind of venereal affection. Upon what, then, does this immunity to syphilitic infection which obtains in some persons depend? If we say that a patient can have syphilis once only during his lifetime as a rule, and if we find that a certain number of children have hereditary syphilis, does it not appear probable that these children, when they grow up, would have an immunity from further infection; or that, if the disease did appear again in them, it would be in a greatly modified form?

Modern researches in this branch of science bring us back to that which shrewd observers, without the advantages which we at present possess, had long ago observed. In 1812, Dr. Fergusson came to the conclusion that syphilis had become so much mitigated in Portugal, by reason of general diffusion or other causes, that after running a mild course it exhausted itself, and ceased spontaneously. Dr. Fergusson further mentions that he had reason to believe that at that time in other countries the disease had become modified in a similar way. He mentions that in certain German regiments and in some districts of the Russian empire the medical attendants had found that mercury was not necessary for the treatment of syphilis, and that in the patients to whom he referred, the disease, from being allowed to run its course probably for ages, had become as weak as it was found to be in the Portuguese. All adventitious diseases, says Dr. Fergusson, that are not connate, endemic, nor sporadic, appear more or less to run this course of exhausting themselves while retained upon the same ground to which they have been transplanted; but let the field be changed, and fresh sources of development be presented, and they will instantly resume their primary powers, and, taking a fresh departure of violence, repeat the almost forgotten inflictions of their original visitation. The powers which they thus acquire bear some resemblance to a phenomenon which is everywhere observable in the vegetable kingdom. The same species of seed may be sown upon the same ground until it shall so degenerate in point of vigour as to become almost incapable of reproducing itself; but let it be changed to any other kind, though even of far inferior quality, and it will immediately display new powers of life, and fructify and vegetate with its native strength.

Similar to the above appears to be the inoculation of the exhausted syphilitic virus of Portugal (though evidently the same disease) into the constitution of the British or other strangers. It is in some measure new, therefore unfriendly, and seems to have the power of exciting new actions of more than ordinary violence.

The Portuguese, through apathy, and at a dreadful price levied on the generations that are passed, and never in all probability to be redeemed by their descendants, appear to have gained a great exemption from both syphilis and variola; but the price is too high for us ever to offer up our bodies to be the unresisting subjects of disease, the fatal consequences of which, though they might go far to extinguish one or two ills, would be felt in the deterioration of our race to the most distant ages.

The same facts, with regard to the modified form in which syphilis appears in some of the lower classes of the community, have been observed in our own country.

Mr. Rose, formerly surgeon to St. George's Hospital, found from experiments conducted at one time on a large scale in one of the regiments of Guards, that he could treat syphilis when it appeared amongst the common soldiers by topical applications alone. It is true that at the time Mr. Rose conducted his experiments no clear distinction was drawn between those syphilitic affections which, if left to themselves, would infect the constitutions of the patients and those which would not; and, therefore, a great many sores were no doubt said to be cured without mercury which, under no circumstances, would have been followed by secondary symptoms. It is exceedingly probable, however, that a certain proportion of the cases treated by Mr. Rose really depended upon the infecting variety of the disease; and as Mr. Rose found that he could deal with these cases without administering mercury, we can only conclude that the disease he was treating had appeared in some modified form, such as Dr. Fergusson had noticed in Portugal, and such as he states to have existed also in Germany and in Russia. As soon as Mr. Rose tried his plan of treating syphilis without mercury amongst the officers of the regiment in which his experiments had been made, the plan was found to be unsuccessful; and we have the authority of Sir Benjamin Brodie, who witnessed these experiments, for stating that in private Mr. Rose treated syphilis with mercury like other medical practitioners; and that in cases where he did not administer it, he was continually becoming involved in difficulties.

It must, however, be noted, that the proportion of infecting sores, in some regiments of the Line, is exceedingly small. This circumstance has already been referred to in the second lecture, and is proved by Mr. Labatt's published work.

To what, then, is to be attributed this comparative immunity to the severer forms of acquired syphilis, and the modified form in which it has been occasionally noticed, not only in Portugal, in Germany, in Russia, but also in our own country? The answer to this important question arises out of the observations already made. That which Dr. Fergusson observed in his day may be seen at present. A person who has had hereditary syphilis in his youth will either not contract the infecting form of syphilis in after life, or will have it in a modified form. An extensive observation of cases as they occur in public hospitals will at once show that syphilis as it presents itself among those classes who are likely to have inherited the disease, is a different affection from that which is observed under other circumstances. The same law may be traced in the history of individual cases. Instances have come before me where patients, the offspring of parents supposed to have been syphilitic, have shown some modified syphilitic symptoms for many years after they have grown up; and these patients have appeared insusceptible to any further infection. But it may be said that certain individuals who have never shown any symptoms of either hereditary or acquired disease are also apparently not capable of receiving the infecting form of syphilis, or, if infected, that they have the disease in so mild a form as not to require mercurial treatment. The explanation of the occurrence of even these cases is not difficult. An instance lately came under my notice where a woman with the remains of what I believed to be a syphilitic eruption had been impregnated ten times. Seven of the children had died, either from the premature confinement of the mother, or within a year or two after their birth; of the remaining children, two had eruptions which were treated with mercury, and one only never had had any symptom of hereditary disease. Shall we say, in this exceptional case, that because the visible symptoms of any hereditary affection were wanting, therefore something like the same diathesis was not communicated in this, as in the other instances? Or are we quite sure that hereditary syphilis, like gout and certain other diseases, may not pass over some individuals, or even a generation (as far as its sensible effects are concerned), again to appear in some mitigated form in their descendants? It would obviously be wrong, in the case of any hereditary disease, to say that because the symptoms were absent in an individual, or in one generation, therefore the diathesis had ceased; and we know not yet through how many generations the latent effects of hereditary syphilis may not produce *some* influence. A man advanced in years, whom I knew from seeing him in a London hospital, and who had formerly had a variety of venereal affections, had a grown-up family. One of his daughters had an eruption on the skin at about seventeen or eighteen years of age, which eruption was treated with sarsaparilla. One of the sons, although he had frequently exposed himself to contagion, never contracted the infecting form of syphilis. This son married, and had a family. After a time his wife had an eruption on the body which was supposed to be syphilitic, and yielded readily to antisyphilitic remedies. Last of all the son himself had an eruption exactly resembling that of his wife. This I had an opportunity of seeing, and believe it to have been a mild and modified form of hereditary syphilis, which had then developed itself in a visible form for the first time. Had this son been one of Mr. Rose's patients, he no doubt would have been successfully treated without mercury; but it would be a grave mistake to suppose that syphilis in what has been called a virgin constitution can be treated in the same way.

LUNATICS.—On the 1st of January, 1861, there were 24,845 insane persons in the asylums, hospitals, and licensed houses in England and Wales. On the 1st of January, 1862, there were 26,200; out of whom 3244 were deemed curable; 3138 had been discharged during the year, and 2648 had died.

SOME FURTHER OBSERVATIONS ON THE OPERATION FOR THE DIVISION OF THE CILIARY MUSCLE.

BY HENRY HANCOCK, F.R.C.S.,
SENIOR SURGEON OF THE ROYAL WESTMINSTER OPHTHALMIC AND CHARING-CROSS HOSPITALS.

DURING the three years which have elapsed since the operation for the division of the ciliary muscle was first introduced to the notice of the profession it has been employed in various affections of the eye. The diseases in which it has proved most successful have been kerotitis, sloughing of the cornea, staphyloma, dense opacity of the cornea (in some cases of several years' duration), and conical cornea; also in certain forms of amaurosis; in acute and chronic glaucoma, and in posterior staphyloma and myopia. Before, however, I enter upon the detail of these cases I would explain the grounds upon which I have proposed this operation; inasmuch as some gentlemen who have written upon the subject have very erroneous opinions on the matter, and attribute ideas to me which I by no means entertain.

Although considerable attention has been paid to the structure and uses of the ciliary muscle, no one has hitherto sufficiently insisted on the important influence which it exerts in disease upon the circulation and consequent nutrition of the eyeball. The experiments of Cramer, Helmholtz, and H. Müller, whilst proving the value of this part in the "accommodation of the eye," show also that, in health, it possesses both elasticity and contractility; and whilst the experiments of Helmholtz demonstrate the influence which it exerts in the adaptation of the lens to the accommodation of the eye, we cannot overlook the influence which it must also exert over the cornea, sclerotica, choroid, and iris, in adapting them likewise, especially when its connexion with these coats of the eye is borne in mind. Heinrich Müller distinguishes two sets of muscular fibres in the ciliary muscle: *external* or *radial*, springing from the inner wall of Schlem's canal, and passing outwards and backwards, to be inserted into both the sclerotic and choroid; and *internal* or *circular*, running parallel with the corneal margin, and situated principally in the antero-interior part of the muscle, near the insertion of the iris. As a whole, we find it closely connected with the line of junction between the cornea and sclerotica, the choroid and iris; and receiving the middle portion of the posterior elastic layer of the cornea, whilst the most anterior portion forms distinct columns, constituting the pillars of the iris (Bowman), or "ligamentum iridis pectinatum" (Huck). "It is continued with the iris, and is closely attached to the circular sinus of Schlem, connecting the iris at this point and constituting a bond of union between it and the ciliary processes. The retina likewise terminates in its ora serrata at the posterior edge of this muscle. The long and several of the anterior ciliary arteries pass through it, as well as many of the posterior ciliary arteries in their passage from the choroid to the iris; whilst the choroidal veins, having reached the ciliary muscle, turn with a sharp curve along it, and, uniting, form a nearly straight horizontal vessel, of considerable size, along its posterior edge. The ciliary nerves also run through it, ramifying freely throughout its substance." (Nunneley: "Organs of Vision," p. 168.) And although absorbents have not been demonstrated in this structure, it may fairly be inferred that this arises from their extreme minuteness, rather than from their non-existence.

From the above description we gather that the so called ciliary muscle is a body possessing in the natural state both elasticity and the power of contractility, exerting the power of accommodation of the eye to various foci, and permitting the transmission of bloodvessels, nerves, and, in all probability, of absorbents, through it, without interruption to their functions.

In a paper on Glaucoma (THE LANCET, Jan. 26th, 1861), Mr. Nunneley writes—"Mr. Hancock believes the disease does not depend upon hypersecretion of the vitreous humour owing to disease of the choroid coat, but that it essentially depends upon continuous spasm of the ciliary muscle, which, according to him, induces the hardness of the globe of the eye." Whilst Mr. Haynes Walton, in the last edition of his work on "Surgical Diseases of the Eye," observes—"It is not probable, I think, that such a muscle as the ciliary could contract with sufficient force to groove the hard and stony eyeball of glaucoma, still less likely is it that such spasm could be continuous."

I have never believed, nor have I ever stated, that glaucoma is caused by spasm of the ciliary muscle, whether persistent or temporary. I have stated that, in my opinion, the opthalmoscopic and pathological appearances of the *bloodvessels* were greatly enhanced by, if not in some instances entirely due to, the obstruction of the circulation, caused by the undue and excessive constriction exerted on them by the spasmodic or *extreme contraction* of the ciliary muscle; but I have never as yet said anything about the ciliary muscle inducing hardness of the globe of the eye, nor of its contracting with sufficient force to groove the "hard and stony eyeball of glaucoma."

I believe that glaucoma is not caused by hypersecretion of the vitreous humour; but that it has its origin in some peculiar condition of blood, considered by most ophthalmic surgeons as gouty or rheumatic—a view of the question most ably supported by Mr. Canton in his admirable papers "On Atrophy and Degeneration of the Arteries," and confirmed by the writings of Lawrence, Sichel, Mackenzie, Tyrrel, Bell, as well as by the dissections of Eble and Rosas; that the muscular fibres and bloodvessels become implicated, as sooner or later do the heart and bloodvessels in that disease; that the ciliary muscle, losing its elasticity and contractility, is converted into a rigid, unyielding cord. The eye is consequently deprived of its accommodating power, and the bloodvessels— nerves, and doubtless the absorbents, from their peculiar arrangements with reference to this muscle—being compressed, the circulation through these vessels is impeded; their coats, already weakened by the exciting disease, yield, form aneurismal pouches, give way, or become varicose. The parts supplied by these vessels, nerves, &c., are deprived of their nourishment; whilst the intra-ocular effusion or hypersecretion takes place subsequently to, and resulting from, these morbid changes.

In the case which I related in THE LANCET for 1859, the attack came on so suddenly after exposure to a strong light without any premonitory symptoms, and was attended with so much acute pain, that I have no doubt the constriction, in this case at all events, resulted from spasmodic contraction, perpetuated by the intensity and persistence of the disease. In other instances, however, when the disease progresses more slowly and insidiously, where there is gradual and progressive degeneration of structure, I can readily understand that the ciliary muscle should become implicated and converted into a rigid, unyielding, inelastic ring, from that cause rather than spasmodic contraction; but although I firmly believe that these two conditions do exist, I am bound to admit that I cannot adduce any dissections in support of this opinion, as in no single instance has the operation for the division of the ciliary muscle been followed by any symptoms which would render extirpation of the eyeball justifiable.

Mr. Haynes Walton seems to think that the hardness of the eyeball precedes the constriction of the muscle, and that I believe the muscle by its contraction actually draws in the distended coats forming the sulcus met with in glaucoma and other diseases of the eye. On the contrary, I believe the contraction, whether spasmodic or otherwise, precedes the hardness; and that whatever influence the muscle exerts in these cases upon the coats of the eye is of a passive rather than of an active nature; that, in other words, it does not "groove" and draw the coats of the eye in, but that it prevents the coats of the eye expanding at this point; hence a given quantity of fluid effused within the eyeball would render it more tense than where such condition of the ciliary muscle does not obtain, and this may easily be verified by the following experiment:—I took a piece of the intestine of an ox, and having placed an elastic india-rubber ring around it, I forced in as much water as it would hold by means of a bladder syringe. Of course, as the water was forced in, the ring expanded, and the intestine became uniformly tense, and by measurement I found the quantity of fluid thrown in was forty-two ounces. I then removed the india-rubber ring, and substituted a ring of string of the same size as the india-rubber ring when not expanded, and I again injected as much water as I could; but as the string was inelastic, the gut was constricted at the spot encircled by it, whilst the quantity of fluid measured only thirty-three ounces, so that the loss of elasticity diminished its capacity by nine ounces.

(*To be continued.*)

ON A

CASE OF EXTRA-UTERINE FŒTATION.

By WALTER SCOTT, M.D. Edin.

AMONGST the many complications of the puerperal state there are few, perhaps, attended with more interest than the different forms of extra-uterine fœtation. The rarity of their occurrence—the difficulty of diagnosing them with any degree of certainty—the inefficiency of medical or surgical interference to influence their final result, together with the immense risk to the life of the subjects of them, all tend to excite a profound interest in the mind of the medical practitioner. The following case, which came under my observation towards the end of last year, I am induced to publish, in the hope that it may prove acceptable to some of the many readers of THE LANCET.

Some time during the last week of September, 1861, I first visited Mrs. R——, aged forty-two, residing at Brentford-end, a poor woman who worked in one of the market-gardens. She had had ten children, the youngest of whom was born nearly three years ago. I found her at that time suffering principally from constipation, which she told me was habitual. After the administration of a large dose of castor-oil, I found her next day much relieved of the pain in the abdomen she had previously suffered from. Until within the last twelvemonth she had always enjoyed good health, and unless while pregnant or suckling she had menstruated regularly. For the last year, however, her catamenia had appeared at irregular intervals of six, seven, or eight weeks, and usually in large quantity. For more than two months before I visited her she had "seen nothing," until, on the fourth day of my attendance, she told me she had become poorly, and that the discharge was very abundant. After a few days' rest in bed, the flow had diminished very much in quantity, and she felt so much better that she was able to come down-stairs. As she was still suffering from anæmia and debility from the loss of such a large amount of blood, she was ordered the ferro citrate of iron and quinine in five-grain doses, thrice daily.

On the morning of October 12th, I had intimation that she had suddenly become much worse. When I went to her she was in a complete state of collapse, with cold extremities, pulse imperceptible at the wrist, throwing the arms about, and complaining of intense pain in the abdomen. She was evidently fast sinking, and died in half an hour afterwards.

As I could not refer this her last illness and death to any symptom I had previously seen her suffer from, I determined upon making a post-mortem examination, which accordingly I did next day (twenty-four hours after death), in the presence of Dr. Mackinlay. On opening the abdomen I found it filled with fluid blood. The abdominal viscera were very anæmic, but otherwise normal. On passing the hand down into the pelvis I found it filled with coagulated blood. The uterus felt much larger than the natural condition of that organ, and in the situation of the right broad ligament there was felt an unusual tumour. As I could not get this tumour examined with sufficient care in situ, I removed the uterus, ovaries, tumour, &c. The uterus, which was nearly four times its natural size, was lined internally with a finely villous membrane (decidua?), and its cavity contained a considerable quantity of yellowish, pulpy, gelatinous matter. Opposite the right Fallopian tube the lining membrane appeared thicker than at any other part, and was very much congested; the rest of the membrane, and indeed the whole body of the uterus, was perfectly anæmic. The left ovary and Fallopian tube were normal, as was also the right ovary. The right Fallopian tube, about its middle part, was dilated into a tumour about the size of a large egg. It was covered with firm coagula, on removing which, a dense plexus of veins was disclosed. This plexus consisted principally of large veins, which ramified over the greater part of the tumour; it was thickest over that portion of it nearest the uterus, leaving the part nearest the fimbriated extremity of the Fallopian tube comparatively open. On opening the Fallopian tube near its fimbriated extremity and dissecting it carefully back, it was found to cover an amniotic sac, containing amniotic fluid, in which floated a perfectly formed fœtus, from an inch and a half to two inches in length. The cord was twisted round the body of the fœtus, and afterwards inserted into the edge of the thick part of the sac.

This was a pure case of tubal extra-uterine fœtation. I look upon the finely villous membrane lining the uterus as a modified decidua, and the plexus of veins over the greater part of the sac as a modified placenta. I did not attach much importance at the time to the circumstance of my patient not having been poorly for nearly three months, looking upon it rather as one of those irregularities which women of her age frequently experience. From the congested condition of that portion of the lining membrane of the uterus opposite the left Fallopian tube, and corresponding in situation to a decidua serotina, I refer the last uterine hæmorrhage to that point. I could not detect, however, any appearance of blood in the portion of the Fallopian tube between the fœtal sac and the uterus.

The immediate cause of death was rupture of the large veins forming the plexus over the sac, and the consequent escape of a large quantity of blood into the cavity of the abdomen. I was able to detect with facility the points of rupture—three in number—by gently removing small plugs of coagulated blood from their openings. Taking the various circumstances of the case into consideration, I thought the diagnosis of extra-uterine fœtation, in this particular instance, attended with even more than usual difficulty. As she was forty-two years of age, had not been pregnant for three years, and as she had menstruated irregularly during the last twelve months, I was induced to think that she had reached the period of life at which women cease to bear children; in fact, that she was undergoing what is commonly called the "change of life."

Isleworth, 1862.

ON A SEVERE CASE OF SCORBUTUS.

By SOMMERVILLE OLIVER, M.D.

ON the 28th of June, 1862, I was called by Mr. M—— to visit his wife, who was, he said, suffering from rheumatic pains in various parts of her body. After entering the room in which my patient was lying in bed, I noticed on her arms (which were uncovered by the bedclothes) yellowish bruise-like marks, which induced me to suspect that the pains of which she complained were connected with scorbutus—not rheumatism. Of this I was soon made sure, for on examination I found similar appearances on the legs; and the gums, where they touched the teeth, were congested and swollen, and presented the usual dark-red or somewhat purple appearance. The whole gum of the molar region of the lower jaw on both sides was unusually swollen, and not unlike half-putrid liver; and the molar teeth were absent, the fangs of one of them alone remaining. The gum of the upper jaw, and particularly of the molar region of it, was not nearly so badly affected as that of the lower jaw, nor were the molar teeth of it very evidently loose, which latter condition may perhaps be attributed to the upper molar possessing three more or less divergent fangs.

The history of the case I ascertained to be as follows:—For two months the woman's husband had been absent from home, and during that period she rarely prepared any dinner for herself. Both the morning and the evening meal consisted of tea with bread-and-butter, and occasionally an egg. Very little milk, and no flesh nor succulent roots or vegetables were consumed during her husband's absence. Her strength gradually diminished, and hæmorrhage from various parts, such as the gums, nostrils, and uterus, occurred. In mentioning the hæmorrhage from the last-named organ, the woman informed me that, though nursing her child of eleven months old, she had menstruated *every day* for the last two months, whereas previously the discharge occurred only once a month. That it was merely the catamenia I did not believe; indeed, I felt almost certain that it, also, was simply a result of scorbutus. The cervix uteri was not distinctly more tumid or spongy than is natural during the interval between the menstrual discharges, nor did it appear discoloured when viewed through the speculum; and the os was apparently not more patulous than is usual during the period referred to. Milk was still secreted by the mammæ in almost ordinary quantity.

I mentioned to the woman that, in my opinion, defective diet had been the cause of her suffering, and desired her to take potato-soup (the gums being so bad and some of the teeth so loose as to render mastication difficult or impossible), beef-tea, and milk daily. I also prescribed iron, potass, and lemon-juice.

July 1st.—To-day I have again seen Mrs. M——. She is still weak and in bed, though she expresses herself as being stronger than when I first saw her, and states that she is nearly

free from the pains of which she complained in the legs, arms, and other parts. On examining the mouth again, I find that I had during my first visit erred in supposing that the molar teeth on both sides of the lower jaw were absent, for now there are to be seen two good molar teeth (the wisdom tooth on each side), the crown of each being nearly half uncovered by gum. The tooth on the left side was so entirely covered by gum that I did not observe it during my first visit, and the tooth on the right side was so much covered that a small portion of the upper surface of its crown was alone visible, and that I mistook for the fang of the tooth, supposing that the crown had d sappeared by decay. Now, however, the gum has improved so much that, as previously stated, the crown of the tooth on both sides has become quite apparent. I have now learned from my patient that, previous to my attendance on her, she removed the two anterior molar teeth of both sides of the jaw by means of the fingers alone, the teeth being very loose. She also tells me that she picked away "black pieces of flesh" from the gums.

4th.—The woman's husband has called to-day and informed me that his wife was able to be out of bed for a short time. The pains in the legs and arms have entirely subsided, and she feels herself improving daily in strength. The same treatment is still continued.

9th.—I called at my patient's house for the last time, and found her out of bed and attending to her usual household duties, though she is still rather feeble. The bruise-like marks have disappeared, and the gums are almost natural as regards appearance and firmness or consistence. The nasal and other hæmorrhages have ceased.

Edinburgh, July, 1862.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

KING'S COLLEGE HOSPITAL.

EXTROVERSION OF THE BLADDER FROM CONGENITAL DEFICIENCY, WITH A DOUBLE HERNIA; FAILURE OF OPERATION; USE OF A NEW APPARATUS.

(Under the care of Mr. PARTRIDGE.)

AN example of this distressing malformation was recently admitted into this hospital. Such cases are not unfrequent, and two or three have been under treatment in our hospitals at the same time. The prominent features of these interesting and important cases have been described by pathologists both at home and abroad. The latest writer to any extent upon the subject is Mr. M'Whinnie,* to whose lot it has fallen to meet with more instances of the malformation probably than any hospital surgeon in this or any other country. From the time that a poor girl about thirteen years of age was admitted into St. Bartholomew's Hospital some twenty-five years since, whose case is figured and described by Mr. M'Whinnie, there have probably not been more than two or three cases recorded in which any good has been effected by operative means. In the above instance an attempt was made to destroy some of the exposed mucous surface, without any good result. Palliative measures by mechanical contrivances therefore are our only resource, and fortunately they have been successful in affording comfort and relief to those who were utterly helpless and a burden to themselves. The case of the young girl alluded to was also the first in St. Bartholomew's or any other English hospital in which some substantial help was given by the use of any apparatus. It consisted of a modified shield, designed by Mr. Earle, protecting the sensitive surface; the urine, as collected, being conducted to a caoutchouc bottle. There have been subsequent improvements, which are described in Mr. M'Whinnie's paper. In a recent case, the apparatus, which had been planned for the extroverted bladder, was so constructed, in combination with a double truss, by Ferguson, that, whilst it fulfilled its particular object in fixing the metallic cup, it also supported a hernia on both sides—a frequent complication of the infirmity. In the following case a double hernia was present, and the instrument completely answered its purpose in keeping the hernia reduced and removing the urine as fast as secreted. The operation which had been performed had not proved successful.

If to the many cases that could be referred to amongst both the higher and lower classes scattered about the country, any testimony were wanting as to how far the apparatus has fulfilled its object, it would be at once furnished by the following extract with which Mr. M'Whinnie has favoured us from Dr. William Bullar, of Southampton:—

"The boy was about fifteen years old when he came under my notice, a nuisance to himself and to everyone, as the urine was allowed to drip away as it was secreted, and to fall through a hole in his drawers. Owing to this he had been neither educated nor employed. The patient was in St. Bartholomew's Hospital six months, and he was sent home with the machine you describe, made by Mr. Ferguson, which answers so well that the boy is now apprenticed to a chairmaker, and earning his living—a nuisance to no one. The authorities of St. Bartholomew's Hospital were very generous in providing him with the instrument. Tell your colleagues how well it has answered, and what a service it has been to the lad. The boy in addition was taught to read and write whilst at St. Bartholomew's Hospital by one of the patients. Altogether the instrument has been the making of the poor fellow."

Mr. M'Whinnie informs us, that since the publication of his paper about twenty-five cases have come under his immediate observation, and he could refer to others with which he has been acquainted. A great many were males, although the first patient under his notice at St. Bartholomew's Hospital was a female, whose case is figured in his paper.

For the notes of the following case we are indebted to Mr. J. Barr Brown, late house-surgeon to the hospital.

Henry W——, aged twenty-one, admitted Sept. 24th, 1861, with congenital deficiency of anterior wall of urinary bladder. Unmarried; a native of London. Has never sought medical advice till the present time. Has led a steady life. Has no desire for the society of women. Has no erections during the day, but generally one at night soon after getting into bed; this, however, soon passes off. Has never had connexion with a woman.

Sept. 27th.—He was examined by Mr. Hulke. The symphysis pubis was absent. In its place is visible the exposed mucous surface of the posterior wall of the bladder. This protrudes as a rounded tumour about two inches in diameter. The upper portion is divided into two parts by a narrow belt of thin skin, as from cicatrix of the umbilical cord. The extremities of the horizontal rami of the pubes form each a rounded boss, the space between them being about two inches and three-quarters. There is no umbilicus. The recti abdominis muscles diverge about two inches above the tumour as they pass downwards to their insertion. Below the bladder is a short split penis, measuring two inches from end of glans to its root at the scrotum. The urethra and glans are split open along the upper surface, so that the urethra forms a shallow groove one inch and a quarter wide, displaying the orifices of several follicles; and at its posterior extremity, immediately in front of where it joins the bladder, is a median elevation (probably the veru montanum), with the open mouths of follicles around it. There is a stout prepuce, leaving the glans uncovered. The scrotum is excoriated and warty from constant irritation of the urine passing over it, and contains on either side a well-developed testicle. Hair grows upon the scrotum, spreading up on each side to the groin. The urine could be easily seen issuing in jets at intervals from the ureters at the lower part of the tumour on either side. The tumour presented a velvety appearance, of a bright-red colour.

Mr. Hulke was at first undecided which of the three following operations he should perform; but finally he adopted that first described.

1. He proposed to cover the exposed mucous surface of the bladder with a hood or veil of skin made of two quadrilateral flaps, turned round a quarter of a circle, and united along the median line to each other, and fitted into a horizontal incision just above the bladder, across the scar of the umbilical cord. If this should succeed so far, afterwards to unite the lower free margin of the hood to the sides of the split urethra. The ad-

* London Medical Gazette, 1850.

vantage of this operation is, that the bases of the flaps receiving the superficial epigastric artery, the flaps will be abundantly supplied with blood. The objection is, that the lower end of the incision forming the inner side of the flap may admit urine into the cellular tissue, if it gets ponded up, and has no ready exit; yet by keeping the trunk raised, and drawing down the penis, this ponding up of the urine may be avoided.

2. Another plan is that adopted by Pancoast (see *North American Medico-Chirurgical Review* for 1859, vol. iii., p. 709). Take two lateral four-sided flaps having their attached sides by the sides of the bladder, fold these flaps on themselves, and join them along the middle line, and to a horizontal incision above the bladder in such a way that the skin is next the mucous membrane and the raw surface is external. The advantage is that urinary infiltration can hardly take place. The objection is that the hairs on the skin grow against and irritate the mucous membrane.

3. A third plan is Ayre's (see same volume of same *Review*). In his operation a large flap is taken from above. The objection is that, the recti muscles diverging as they pass downwards, the abdominal wall in the middle line has only a strong fascia between the skin and the peritoneum, which fascia it would be hazardous to expose to such an extent as would be necessary to form a large flap.

28th.—Mr. Hulke performed the first of these operations, the patient being under chloroform. The penis was stitched to the scrotum to allow the escape of the urine. Given one grain of hard opium in pill every eight hours.

The needles which were to close up the gap where the flaps were removed were taken out on the 4th of October. The stitches were detached on the 5th. The flaps did not adhere well, though various measures were used for the purpose. The wounds have all healed up, but the patient has not been much benefited by the operation. He is to have an apparatus of gutta percha, attached to a double truss, in which to catch the urine. The exposed surface of mucous membrane is certainly smaller than before, and the new flaps form a good support for the apparatus to be worn.

He subsequently came under the care of Mr. Partridge.

In making an instrument for this patient, the object to be accomplished was to protect the sensitive surface of the bladder, reduce and retain the double hernia, and afford some kind of receptaculum for the constantly flowing urine. The instrument devised by Mr. Bigg consisted of a japanned copper shield, covered with caoutchouc, and accurately fitted to the pubic region of the body, this shield being retained in its position by two strong pelvic springs fastening behind. Within the shield, and corresponding with the inguinal surfaces, two india rubber pads were placed for the purpose of retaining the hernia. At the lowest margin of the shield a small orifice, opening into an india-rubber bag properly furnished with valves to prevent regurgitation, gave egress to the urine, and retained it until removed by opening a small tap at its inferior extremity. The whole was kept firmly *in situ* by two padded leather straps passing under the perineum, and fastening to the back of the pelvic band. The advantage of this instrument is its great simplicity of construction, consisting of one piece, instead of a truss and shield combined, as is sometimes adopted. Where the two appliances are separate, perfect apposition of their relative mechanical parts is rendered almost impossible, whereas in Mr. Bigg's instrument, its margins perfectly accord with the anatomical form of the region to which they are applied. This instrument has completely effected its object, and its cost is so moderate that it is within the reach of even a poor person.

ST. BARTHOLOMEW'S HOSPITAL.

CANCER OF THE MAMMARY REGION IN A MAN; EXCISION OF THE DISEASE; RECOVERY.

(Under the care of Mr. SKEY.)

WE have had occasion before now to draw attention to the invasion of the male breast, or the situation which it occupies, by carcinoma; and when cases of the kind occur they are invested with some amount of interest in consequence of their rarity when contrasted with the same disease in the female.

In the early part of July, a man, forty-four years of age, was admitted with an ulcerated surface over his right breast, which presented the appearances of malignant disease, together with its physical characters. It had been present for twelve months, and was steadily increasing. Mr. Skey described it as scirrhus of the mammary region; he could not, he said, call it of the mammary gland. Both to the eye and the touch it possessed the characters of scirrhus, with the additional evidence of a number of knotty swellings around it, which originated coincidently with the large circular ulcerated surface, possessing a diameter of three inches.

On the 12th of July these affected portions were carefully excised, chloroform having been administered. There were two hard glandular swellings in the axilla of the same side, which were not interfered with. Both, Mr. Skey remarked, conveyed the impression that they formed part of the original disease. Why did he not remove them? Because, as he further stated, although they had the aspect of cancer, he was not certain that they really were so. He considered it prudent, therefore, to leave them, in the hope that they might subside, now that the primary irritation has been withdrawn.

July 26th.—The wound is fast healing up by granulation, and the man is doing well. The axillary swellings are diminishing.

WESTMINSTER HOSPITAL.

WARTY GROWTHS ON THE LABIA EFFECTUALLY REMOVED.

(Under the care of Mr. BROOKE.)

CONDYLOMATOUS or warty excrescences, which are not uncommonly seen in females about the labia, extending backwards towards the rectum, are usually the result of want of cleanliness during attacks of gonorrhœa, and when removed by the surgeon have a tendency to return. This recurrence often causes great inconvenience, and necessitates a second and sometimes a third operation. A case of the kind we remember being under the care of Mr. Brooke many months back, in which numerous warty excrescences were excised; but they returned in great excess, so as to give the labia majora the appearance of two prominent tumours, which had subsequently to be removed with the écraseur by Mr. Hillman. In the early part of July a young married woman was admitted under Mr. Brooke's care with a series of excrescences growing on either side of the external organs. These growths were very prominent, extending backwards for several inches, and laterally towards each groin. Their thickness must have been fully three-quarters of an inch, and on close examination they resembled multitudes of elongated papillæ closely packed together. Under chloroform, the whole of them were cut away with a sharp scalpel down to the surface of the true skin; this was attended with some amount of bleeding at first, but which readily subsided; and to prevent the possibility of recurrence of growth, a heated iron was passed over the denuded surfaces, and cold applications were then made over these. The result thus far has been satisfactory, and it is expected that the cure will be permanent, unless a fresh attack of gonorrhœa be contracted. Some surgeons find the application of a styptic or astringent lotion usually sufficient to prevent recurrence after the removal of warts. Professor Pirrie, of Aberdeen, has found a solution of sulphate of copper applied to the surface effectual in accomplishing the desired end when the warts were excised.

UNIVERSITY COLLEGE HOSPITAL.

WOUND OF THE THROAT IN A BOY, TWELVE YEARS OLD; RECOVERY.

(Under the care of Mr. ERICHSEN.)

IT is most unusual for a mere lad to be guilty of the rash act of cutting his throat, although instances now and then are recorded where suicidal attempts have been made by very young persons.

On the evening of the 16th of June, George B——, aged twelve years according to his father's account, but who looks fifteen, was brought into the above hospital. A short time before he had inflicted two severe gashes across the front part of the neck with a razor, which wounded the trachea. They had penetrated pretty deeply, and a good deal of blood was lost from the two gaping wounds. These were closed by Mr. Smith, the house-surgeon, and in forty-eight hours had united by adhesion. A few days after the boy was discharged quite well. He is a very intelligent-looking child, and deeply grieved at having committed such a foolish act; but the truth of the matter is,

that his home is uncomfortable, his father frequently scolds him, and he has a step-mother. Previously to the attempt on his life, he had been severely reprimanded by his father, and in a sudden fit of anger he committed the injury upon himself.

WEST LONDON HOSPITAL.

ACUTE GLAUCOMA; IRIDECTOMY; RELIEF OF PAIN, AND IMPROVEMENT OF VISION.

(Under the care of Mr. ERNEST HART.)

S. W——, aged forty-six, a stout female, who had been under Mr. Hart's observation for some months, was admitted with all the symptoms of acute glaucoma of the right eye. The sight had for some time been failing, and together with this symptom had occurred repeated attacks of slight inflammation and pain in the right eye. Each of these had subsided under appropriate treatment, leaving the sight in a gradually more obscure and hazy state. With the right she could barely discern anything more than the misty outline of opaque objects; she could not distinguish the features of any person, however near to her, or in however strong a light.

Just before admission she had suffered a considerable exacerbation of pain. The flashes of light and acute throbbing in the ball were intensely painful; her rest was broken; the eye was tense and prominent; the sclerotic in many places thin, and with a tendency to become staphylomatous. Previous ophthalmoscopic examinations had demonstrated the absence of capsular or lenticular opacity. The other eye was sympathizing with this, and had become the seat of agonizing pain, while the visual power was affected.

Mr. Hart tried, in the first instance, the effect of eight leeches, and a mixture of colchicum and iodide of potassium with bicarbonate of potash and henbane, but the relief afforded by these means was only partial. Under these circumstances he resorted to iridectomy. The operation was performed, by the patient's desire, without chloroform. The first step of incision gave great relief, and immediately the knife divided the tense structures and entered the anterior chamber the patient expressed the ease which she had acquired. The excision of the iris, although accomplished with facility, and without any dragging, was felt to be more painful. An opiate was ordered, with an evaporating lotion to the lids. The immediate smart of the operation passed away, and the acute pain in the right eye, as well as the sympathetic irritation of the left, subsided. The subsequent result of the operation has been of the happiest kind. The health of the patient has greatly improved. The right eye is strong, clear, and free from pain, and the sight of the left is gradually improving.

CLINICAL RECORDS.

FRACTURE OF THE SCAPULA.

IN May of last year an interesting case of fracture of the scapula, in a child six months old—an out-patient at the Royal Free Hospital—was brought under our notice by Mr. Hill, the house-surgeon. Fracture existed through the entire bone from above downwards, passing through the spine, so that both the external and internal borders projected backwards: a most peculiar position, presenting a concavity outwards. The injury occurred from direct violence, in a fall down stairs. There was no wound, but the upper angle of the scapula almost projected through the skin; there was free movement of the shoulder, and the deltoid muscle could be brought almost in front of the arm; the acromion process was not broken. The treatment consisted in a bandage over the shoulder and a pad in the axilla.

REMOVAL OF A DEGENERATED NÆVUS FROM THE LEG OF AN INFANT.

AN infant was admitted into Guy's Hospital with a flat tumour, the size of a walnut, on the right leg at its inner surface below the calf. It was primarily a nævus, but under the use of heated pins at another hospital it had become nearly solid, and had degenerated into a form of tumour inconvenient from its situation and likely to be permanent. Mr. Cock therefore removed it on the 24th June, when the child was under the influence of chloroform, and comparatively little bleeding attended the operation. The result will be a complete cure.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JULY 2ND, 1862.

DR. TYLER SMITH, PRESIDENT, IN THE CHAIR.

A REPORT ON A TWIN (?) ABORTION, EXHIBITED TO THE SOCIETY BY DR. LANGMORE ON JUNE 4TH, 1862.

BY GEO. HARLEY, M.D., AND T. H. TANNER, M.D.

IN this case a lady aborted on the 22nd of May, 1862. A fœtus, of about four months' gestation, was expelled; it was flattened, more or less atrophied, and had evidently been dead some time. The placenta was removed; and afterwards a smooth, soft body was peeled off the upper part of the uterine cavity, which proved to be a second bag of membranes. The chorion and amnion were unruptured, healthy, and transparent; and through them an embryo of about five or six weeks could be plainly seen floating in clear liquor amnii. The embryo appeared fresh and perfect, and not at all atrophied. Was this an instance of twin pregnancy or of superfœtation?

Drs. Harley and Tanner were directed by the Society to investigate the question. In their report these gentlemen give the results of an examination of the preparation. They then append some remarks on the structure of the decidua, and conclude thus:—"We are led to assume that the case under consideration is an example of superfœtation, for this reason: If the second, healthy, six weeks' ovum were the product of the same conception as the first four months' fœtus, which had been dead some time when expelled, then we must believe that although the latter perished some days before its expulsion, and manifested symptoms of putrefaction, yet the small second ovum died when six weeks old, was retained for about ten weeks afterwards, and nevertheless when removed was perfectly healthy, and did not present any trace of decomposition. We cannot subscribe to this improbable view. As, theoretically, we see no physical obstacle to the occurrence of superfœtation during the first three months of pregnancy, so we think the specimen now reported upon proves, as far as anything of the sort can prove, that superfœtation is a positive fact."

ENORMOUS DEVELOPMENT OF HYDATIDS IN OMENTUM SIMULATING AN OVARIAN TUMOUR.

BY DR. NEWMAN (STAMFORD),

(*Communicated by* Prof. HARLEY.)

A woman, forty-three years of age, began to suffer from enlargement of the abdomen eleven years ago. In 1861 an incision was made in the right iliac region, when a quantity of pus and hydatids escaped. The opening closed, but the abdomen again enlarged; and the patient died in May, 1862, with symptoms of acute peritonitis. On examination, the omentum was found stretched over a mass of glistening cysts. Masses of hydatids were embedded on the surface of the right hepatic lobe. From them ran an unbroken chain of cysts right across the spinal column and down into the left iliac fossa. The right ovary, as well as the mesentery, also contained hydatids.

A CASE IN WHICH AIR WAS EXPELLED FROM THE VAGINA.

BY GEORGE HARLEY, M.D.

The chief points in the case are these:—The expulsion of the air is accompanied with a loud noise, and, although odourless, is attended with great personal discomfort. It began about eighteen months ago, at a catamenial period, and has recurred with increasing severity at each period, until now there are several discharges in the course of a few minutes. The patient is married. The vagina was carefully examined in order to find if any communication existed between it and the rectum, but none was found. Dr. Harley took a full sized male catheter, to which was attached a long india-rubber tube with a stop-cock at the other end. The catheter was introduced into the uterus, the end of the tube with the stop-cock being placed in a tumbler of water. No air escaped when the instrument was in this position; but on placing the open end of the catheter in the vagina an instantaneous discharge of gas took place. Soon afterwards the water was found to be sucked up through the tube into the vagina; and after one or two other experiments it was found that the vagina sucked-in and expelled the air by spasmodic action. It was further observed that the abdominal muscles materially assisted in producing this result; and although the patient has not the power of commencing the

action, once it has begun and gone on for a few minutes, she has the power of continuing it.

Dr. DRUITT was glad to find that the phenomena of this case had been described by so acute and exact an observer, otherwise the case might have been narrated as one of physometra. He had once been consulted about the case of a lady who, after her confinement in a hot country, complained of want of sexual feeling, and likewise of discharges of air from the vagina. He had attributed both maladies to relaxation, and prescribed cold alum baths. Air would readily enter a relaxed vagina in large quantities; for example, when a woman was placed upon her hands and knees for the purpose of examination.

Dr. GRAILY HEWITT had seen a case of the kind mentioned by Dr. Harley. The lady, to whom the passage of flatus from the vagina was very distressing, was the subject of enlargement and hypertrophy of the vaginal part of the cervix uteri. No fistulous opening existed between the rectum and the vagina. In this case Dr. Graily Hewitt considered that the air passed into the vagina by a kind of suction movement. The rigid flat roof of the vagina constituted by the indurated cervix acted as a dilator of the vagina; when during certain movements of the body the uterus was drawn upwards, air entered the vagina.

Dr. BRAXTON HICKS remarked that the admission of air into the vagina was by no means rare. It might be witnessed not unfrequently in those whose vulvæ were lax and uteri heavy, when they lie down on the examining couch; the weight of the uterus causing it to fall on to the sacrum in the recumbent posture, whereby air was drawn in; while on assuming the erect position it was expelled again by the descent of the uterus.

Reviews and Notices of Books.

Clinical Medicine. Observations recorded at the Bedside. With Commentaries. By W. T. GAIRDNER, Physician to the Royal Infirmary of Edinburgh, and Lecturer on the Practice of Medicine. Edinburgh: Edmonston and Douglas.

WE take the very earliest opportunity of bringing this important volume under the notice of the profession, because we regard it as one of the most interesting and valuable works that has for a long time issued from the medical press of Edinburgh. It is not a work on systematic medicine. It is not a work like that of Dr. Graves, of Dublin, where the clinical experience of the writer not unfrequently furnishes nothing more than a text for a lengthened discussion of all that is known, or has been said, regarding the diseases of which it treats. It is something, if not better, at least equal in value and very different in character from this. It is a record of the impressions made on the mind of a very independent, accurate, and truly conscientious physician, by the facts he has observed, and the cases he has watched as they occurred, and of the modifications or corrections which the conclusions then formed —especially as regards treatment—have undergone by subsequent reflection. The book thus presents as faithful a record of real practice as can well be given, and its value arises from the evidence which it affords, in connexion with his other works, of the very high intellectual and moral qualifications of the author.

Dr. Gairdner does not appear before the public as a man whose reputation has yet to be made, his previous writings having already secured for him a distinguished name as a careful, judicious, and acute pathological observer. They also indicate a highly cultivated mind, trained to patient and laborious research, and capable of vigorous and independent thought; and, best of all, they show a mind all whose inquiries and processes are guided by a supreme love of truth, and what we may call a religious devotion to the duties of his profession, and to the advancement of the science which he cultivates and teaches. The same qualities, developed and matured, are conspicuously exhibited in the present work. There is the same presiding love of truth, both in stating facts and in reasoning from them; there is great acuteness of observation, great patience and care in the detail of symptoms and signs, and scrupulous conscientiousness in not straining the facts to suit a preconceived opinion, or to sustain an inference which they will not bear. Dr. Gairdner, we have said, is both an able and an independent thinker, without being a theorist. From one so competent we might have liked a little more general discussion on the phenomena and character of disease, but then the book would not have been, what it is, almost a photographic representation of the investigation and treatment of illness at the bedside; for there is scarcely a deduction contained in it which does not follow naturally and irresistibly from a consideration of the cases immediately under review. The deductions, moreover, respecting treatment are cautiously dealt with; they are never hastily generalized, or sought to be rashly extended to cases of the same disease, to which, from difference of pathological condition, they are not, perhaps, applicable. Dr. Gairdner warns his pupils, and warns them best of all by the sobriety and candour of his own example, not to be misled, like "them of olden time," into supposing that any one principle will be found to guide us safely and successfully in the management of all cases of disease bearing the same title in medical nomenclature. Yet he is no decrier of the observation or experience of past times, with which he is evidently well acquainted. On the contrary, he gives it all the weight that a wise and reasonable eclectic could desire. And as little is he tempted by modern speculation—with which he shows perfect familiarity—into forgetting that the great object of Medicine is the cure of disease, or into the premature application of views, often imperfectly developed, and, even when established, rather biological than medical, and not fitted either to eliminate morbid phenomena, or to direct remedial measures. This is high praise, but if our readers will peruse the book, we think they will perceive it is not more high than deserved, and in order to justify our estimation of the volume, we now proceed to give such an account of its contents as our space permits.

Without attempting a minute analysis of so bulky a volume, we shall select a few of the most important subjects it contains, and begin with Pneumonia, on which there are three papers. The first, a retrospect of cases treated in Dr. Gairdner's wards in the Infirmary of Edinburgh from November, 1855, till March, 1856, a considerable part of which is occupied with pneumonia; next, a short paper entitled "Treatment of Pneumonia;" and, last, another headed "Five Years' Hospital Experience of Pneumonia." We regard what has been called the bloodletting controversy as one of vital consequence to the character—almost to the existence—of the medical profession. Since the days of Hippocrates certain well-defined and easily-ascertained symptoms, which are well epitomized in Cullen's Nosology, have been grouped together under the name of pneumonia, and universally believed to bear and to require a greater or less abstraction of blood for their relief or cure. Within the last twenty or thirty years, however, this opinion has been violently assailed, and statistical returns have been confidently appealed to for the purpose of proving that this practice, so highly praised in former times, is either nugatory or absolutely injurious, for that patients who are altogether left to the restorative efforts of nature recover in as great or rather greater numbers than those who are subjected to what is called antiphlogistic treatment. Now, if this averment admitted of being fully proved, we do think it would be fatally damaging to the credit and character of our profession; but there are certain considerations which, in our judgment, render the proofs relied on altogether untrustworthy. The discussion is too important, and would extend to far too great a length, to be fully gone into in this article, but we gladly avail ourselves of Dr. Gairdner's guidance to offer our readers a very condensed summary of the form it assumed in Edinburgh. We must plead guilty to being so ignorant of what goes on in the modern Athens as not to have known that the warfare began with our author. Like a canny Scot, however, he soon backed out of the fray, and the war was waged, if we remember rightly, between Dr. Bennett on the one hand, and the "dii majorum gentium," Drs. Alison and Christison, on the other. Dr.

Gairdner does not enter at all into the particulars of the dispute considered in its personal relations—a piece of good taste and forbearance which perhaps not very many physicians personally concerned would have shown, and for which we ought to be thankful; but he gives us, as bearing upon its substantial merits, very clearly, and apparently with perfect good faith, the statistics of his own experience, and to a certain extent the statistics of the Edinburgh Infirmary, respecting the mortality of pneumonia inflammations, from which, without seeking to extend them beyond the limits of the city in which the cases occurred, he deduces certain conclusions which we think it would be difficult to gainsay, and which we believe to be much more widely applicable than he has ventured to suggest. Dr. Gairdner shows that in five years—namely, from 1855 to 1859—only one case had occurred in his wards of death from idiopathic, uncomplicated pneumonia. Other cases died, but all complicated with formidable organic disease or fatal surgical injuries, most of them admitted *in extremis*. Not one of these fatal cases was bled. During the above period Dr. Gairdner treated sixty cases of pretty unequivocal pneumonia, forty more which a mere regard to stethoscopic signs would have led him to place in the same category, but which, though accompanied by more or less acute constitutional disturbance, wanted the *symptoms* characteristic of pneumonia. From these data Dr. Gairdner infers that the number of thoracic inflammations which occur is smaller than has been generally alleged, and that their formidable character has been overrated. From very careful observation, he has arrived at the further conclusion, that inflammatory diseases generally are diminishing both in frequency and in severity, one striking proof of the truth of which belief is, that in the Infirmary of Edinburgh, one of the largest hospitals in Britain, during one winter, only a single fatal case of pneumonia occurred. Further, it may be considered an established fact, which our author himself has the merit of first clearly proving, that the physical signs at one time relied on as furnishing evidence of inflammatory action in the lungs may be, and often are, associated with pathological conditions of a different nature, and when trusted to as guides in practice most seriously mislead us, and vitiate fatally, in two ways, the results of numerical comparisons of mortality—raising the death-rate in a series of cases treated on the depleting plan, which is totally unsuited to them, and lowering it in a series in which the expectant method is pursued. From all this Dr. Gairdner draws certain practical conclusions, which we regret we cannot transfer entire to our pages, they are so sound and temperate. Bloodletting is a remedy of great power in subduing cases of pneumonia suited for its employment—that is, cases exhibiting the combination of symptoms which we referred to above, especially at their commencement, and even by the confession of the expectant party affording a degree of relief, at least, which nothing else does. Such cases, however, in the present day, rarely occur. We ourselves have not seen more than one for upwards of twelve months; nor does a single one of Dr. Gairdner's detailed cases fulfil all the conditions required to indicate bloodletting, according to the recorded instructions of our older authorities. From the comparatively mild character of the disease at this time, and from the nature of the constitutional fever accompanying it, which is frequently of a typhoid type, indiscriminate bloodletting is not only unnecessary, but highly dangerous. In point of fact, each case must be met upon its own special merits, and the treatment conducted rather according to the urgency of the symptoms than the revelations of the stethoscope. Thus there is room, by a judicious practitioner, for every variety of treatment, from occasional venesection to direct stimulation.

This very important subject has occupied so much of our attention, that it is necessary to deal briefly with the remainder of the volume. We pass over the paper on Alcoholic Stimulants and that on Influenza, though both are good, and come to the series of papers on Fever, which form a natural sequel to those on Pneumonia. From the earliest times, and especially from the days of Sydenham, the variations in type or character that occur in the fevers of different years have been recognised and commented on. Some of the causes that produce these differences are sufficiently patent: the supply of food; the state of the atmosphere as to certain appreciable conditions—temperature, humidity or dryness; moral influences: all of which affect the human frame, and modify the diseases to which it is liable. But other causes, of whose nature we are entirely ignorant, and the existence of which we learn only from their effects, do undoubtedly interfere, and that very powerfully, in changing the course and character especially of febrile diseases. "The epidemic constitution of the atmosphere" was the old phraseology, not certainly for explaining, but rather for expressing our ignorance of these general and recondite causes. By whatever name we designate them, however, their effects have been acknowledged at all times. If, then, the fevers vary so much in character and mortality, it gives, as Dr. Gairdner remarks, great additional probability to the opinion that inflammations and the fever accompanying them vary from the same causes, and disposes satisfactorily of the objection to the idea of change of type—that it is an after-thought, to account for a different mode of treatment. Dr. Gairdner is a strenuous advocate of the essential distinction between typhus and enteric fever. He argues his case with great ingenuity, and has evidently prosecuted his inquiries to determine this point with great patience and labour, as well as in a fair spirit.

There are many other important subjects discussed in the volume which we should have liked to consider. In concluding our remarks, however, we wish to express our general concurrence in the views of the treatment of delirium tremens contained in Dr. Gairdner's paper. We have all but abandoned the view formerly nearly universally entertained of the sovereign and specific efficacy of opium in this disease, and now deal with every case on its own specialties. It is quite possible that there may be a difference of type even here; at least, that there may be a difference in the appearance presented by the malady here in the south and in Edinburgh, from the difference in the drinking beverages in which the populations of the two countries indulge. The disease occurring in a worn-out drunkard who has, perhaps, suspended his potations for a time, probably requires a different treatment from what is needed in the case of a person of unbroken strength, who has been attacked by it in the course of a drinking bout. In the former case we do not bind ourselves to abstain from very guarded stimulation, or the cautious use of narcotics; in the latter, we resolutely forbid stimulants, and trust to time and careful management, and if the attack, at its commencement, before the patient has been worn out, is accompanied with convulsions and a flushed face, we have no scruple in applying leeches to the temples and cold to the head. This plan of treatment has been pursued by us for many years with great success.

We now reluctantly take leave of this instructive book, cordially recommending it to our readers, not only on account of the information it contains and the philosophical character it exhibits, but the high moral tone by which it is pervaded.

YELLOW FEVER AMONGST THE FRENCH TROOPS IN MEXICO.—We regret to learn, by intelligence received by the *Tasmanian* from St. Thomas, that this disease is committing the most horrible ravages in the French camp; that out of a regiment of one thousand strong, no less than 475 men, exclusive of thirteen officers, have fallen victims to this disease; that many others of the men are in a most pitiable condition; that every medical officer attached to the regiment has perished; and that General Zaragosa has been obliged to seek assistance from the medical staff of the navy. In this deplorable condition the sickly remnant of the Emperor's troops were surrounded on a recent occasion, but with the undaunted courage which characterizes them, they succeeded in completely routing 5000 Mexicans, visiting them with dreadful slaughter. General Zaragosa is now enabled to keep open his communications with the sea, but no onward movement will be attempted until the arrival of reinforcements in the month of September next.

THE LANCET.

LONDON: SATURDAY, AUGUST 2, 1862.

WITH all the earnestness which becomes the consideration of a great question, and with the sober but deep satisfaction which befits the announcement of a great impending boon which we have long and earnestly sought for the profession, we set forth the statement—now no longer premature—that the completion of a step essential to professional unity, the bestowal of one single and sufficient licence to practise Medicine, Surgery, and Midwifery, is so far advanced by certain regulations under discussion at the College of Physicians, that its speedy accomplishment is now hardly a matter of doubt.

The magnitude of the boon, and the vast influence which this step will have over the interests of the profession, do not need explanation to our readers. To be able to obtain at the hands of one examining body a licence to practise his whole art has hitherto been the great want of the general practitioner. By the contemplated adoption of a course which we have long urged, it will be within the reach of all. The College of Physicians will thus once more resume its place at the head of the profession. To be connected with this great corporation is, in itself, a desirable object for all practitioners; and when this dignified and now liberal body shall have completed its work, it will gradually become the grand centre, the mother and the nurse, of the whole profession. With the growing unity of the body medical, its dignity and power will gain immeasurable strength. It is difficult to say whether the profession will have greater reason for congratulation at the unification of its parts thus to be effected, or the College of Physicians at its restoration to its normal place as leader of the medical body.

But it will be asked, By what strange or powerful means will this radical change be wrought? By no forced or new machinery. By the exercise of the powers which we have often pointed out as already in existence. By the fulfilment of the duties first imposed upon the corporation by its founders, but long neglected, to the detriment of the profession.

We have many times printed in these columns that section in the Act by which the College was incorporated, and from which it derives its powers; it in the clearest language defines Surgery as a part of Physic, and authorizes and ordains its practice by the licentiates of the College. This third section of the Act of Incorporation which LINACRE obtained from HENRY VIII. "for physicians and their privileges" (32 HENRY VIII., c. 40) expressly provides for the power of examining in Surgery, and for the licensing to practise Surgery as a part of the privileges of the College. The clear and philosophic language of that clause is in every way remarkable, and it is likely to be highly appreciated now, when we can foreshadow for it an all-important practical bearing on the destinies of the profession in England. We will again quote, and now bespeak attention to, this most significant clause of an Act which is the Magna Charta of Physic in this country:—

"And forasmuch as the science of Physic doth comprehend, include, and contain the knowledge of Surgery as a special member and part of the same,—therefore be it enacted that any of the said Company or Fellowship of Physicians, being able, chosen, and admitted by the said President and Fellowship of Physicians, may from time to time, as well within the City of London as elsewhere within this realm, practise and exercise the said science of Physic in all and every his members and parts, any act, statute, or provision made to the contrary notwithstanding."

A clause more explicitly worded was never framed. It expressly declares that Surgery is a part of Physic, and may be practised by any of the Company or Fellowship of Physicians throughout the realm. It was in accordance with this section that Dr. CALDWALL and Baron LUMLEY founded a Lectureship on Surgery in the College, and that for a time readings in Surgery were publicly given there.

Thus there is and can be no doubt of the present right of the College to examine in Medicine, Surgery, and Midwifery, to give their licentiates authority to practise Physic, which includes all three of these sciences. On this point legal opinions are decisive, although in a matter so clear no legal opinion was wanted. Hence there will be no need for looking back when, the Council having decided on taking this great step, the Fellows shall proceed to ratify their decision. This resolution is one which will elevate the College of Physicians to the highest position of power and prosperity, while it will confer on the whole profession the greatest boon which could be conceded. It will be the consecration of the principle of unity.

Surprise will now be felt that these powers should have been permitted to remain so long dormant. But it has taken long to convince the leaders of the College of Physicians that their true interests were identified with those of the whole profession, and not solely of the class of consulting physicians. While the College remained an exclusive body, aiming only at the admission of "pure physicians," and pretending to look down on the vast body of medical practitioners, it was deaf to the arguments which could be adduced in favour of the exercise of its whole privileges, and scoffed at the principle of "professional unity" as an *idea*. This idea, which we have so long cherished and set forth through evil and troublous times, the College will now adopt, and will find it the germ of a greatness perhaps yet undreamed of. After the passing of the Medical Act, when its very existence was threatened by the diminution of its members and its loss of influence through long adherence to the principles of exclusion, it started into fresh life, and renewed its term of vitality by admitting general practitioners and creating the new class of licentiates. This was but a partial measure; it will now be completed by licensing these practitioners in all the three parts of their art. The licence will then be perfect—it will be all-sufficient—it will be economical. The practitioner will have the advantage of being connected with the most illustrious medical body in the kingdom, and he will need no other diploma than this most honourable one to secure the confidence of the public and to protect his rights. By offering these advantages to the profession, the College will only be accomplishing its duties while it consults successfully its worldly interests. The declared intentions of the founders, the express provisions of the Charter, the Act of Incorporation, and the accepted endowments of the College, contemplate Physic as one art and science, including Medicine, Surgery, and Midwifery. The College has long been oblivious of these obligations, which we have so often pointed out. In fulfilling them now, it will benefit itself not less than the medical profession.

THE subject of Medical Partnerships is one in which most of our readers are more or less interested, and occasionally questions arise which oblige them to seek the guidance and counsel of members of the sister profession of the law. Without doubt many partnerships are entered upon between medical as well as other classes of men without the aid of lawyers; and it is not seldom that such partnerships give rise to disputes either as to the mode of being carried on, or as to the rights of the partners to, or consequent upon, a dissolution which end in litigation and ill-feeling. There is so wide a difference between a professional and a commercial partnership that many considerations which are applicable to the one are altogether irrelevant to the other. The main feature of a commercial partnership is a combination of money. The characteristic of a professional partnership is, or should be, a combination of talent. An honest and upright partner is a requisite in both cases; but in professional partnerships there is a need of a willingness to work, and a capacity which, if not expressly stipulated for, is silently understood when two professional men agree to combine and share the emoluments derivable from the exercise of their skill. The questions that have arisen from time to time between medical as well as other professional partners, have been the subjects of litigation, and especially upon the matter of a return of premium certain equitable principles have been established which are daily recognised and acted upon by the Courts of Chancery.

We propose to give a general view of these principles, and, without referring to the legal authorities in any precise manner, to convey to them a general notion of the rights and obligations incident to a professional partnership. The point we shall more particularly dwell upon is this: When and under what circumstances—supposing one partner to have paid to the other a sum of money by way of premium for the partnership—does a right accrue to a return of any part of it?

To those who have not considered the subject in any way, the proposition may sound strange that a purchaser who has once bought a share in a practice can recover back any part of his purchase money; but the proposition is true, and her Majesty's Courts of Chancery have given effect to it in a manner sometimes very detrimental to the interests of the partner who had sold a share of his practice. As we proceed we shall point out one or two cases which illustrate this.

In order to make the question clearly understood, it will be as well to state that a partnership may be formed either for a definite period of years, or at will only—i. e., for so long as the parties choose to work together. If a sum of money is paid for a partnership for a term of years, a construction is given to the contract which cannot be made when the partnership is only at will; and, as we shall presently see, the term of years becomes a very important element in the subject, especially as regards the interests of the selling partner. It has enabled Courts of Equity to say that the premium has been paid for the whole of the term of the partnership, and that upon a dissolution a sum is to be returned which is proportionate to the period unexpired of the term. Thus, suppose A has taken B into partnership for a term of ten years, and has received or is to receive £1000 for the sale of the share. If a dissolution take place at the end of two years, A would only be entitled to retain £200 of the premium. In proof that this is so, we quote a case not long since determined by that most able judge, the Master of the Rolls. Two medical gentlemen entered into a partnership for fourteen years, and the premium was £500 down, and a further sum of £500 was to be paid in annual instalments. The partners disagreed, and the partnership was dissolved by the Court with the assent of both partners. A proportion of the premium was directed to be returned, the judge observing—"In the absence of any fraud or gross misconduct on either side, and where the continuation of the partnership has become impossible, by reason of incompatibility of temper, or other causes springing from the parties themselves, and not accompanied by circumstances which are controlled by the contract, I have treated the premium as having been paid for the whole of the term of the partnership. I have apportioned so much of it as belonged to the period the partnership had lasted, and have ordered a return of the rest."

We said that the construction given to the term of years as an element in the partnership was very detrimental to the interests of the selling partner; and we explain our meaning thus:—Mr. A we suppose to have sold a share in what he really had—a large and well-established practice—to Mr. B, a perfect stranger not only to the practice but to the neighbourhood, and perhaps also to the county. From the commencement of the partnership Mr. B has had unlimited opportunities of introduction as a partner, and also received a share of the profits. After the lapse of two years the dissolution takes place, and he receives back the greater part of his money. He can practise in the same spot, and, unless he is not a man of average professional manners and ability, can it be doubted that he would retain to himself a good share of what were lately the joint patients of A and B, and were formerly the patients of A alone? For an expenditure of £100 or so, as the case may be, the buyer has obtained, through the introduction, a tolerably good practice; while the seller has from the commencement of the partnership lost a considerable part of his income, and that probably for ever. It may be said that this evil result is possible under every contract of partnership, and that upon a dissolution the new man may carry everything before him, and leave the old practitioner a diminished practice. So it is. But the sting of the dissolution is, that the seller has to pay back the greater part of the premium; and this necessity is put upon him because his partnership was expressed to be for a term of years. The truth is, that lawyers hitherto, as well as doctors, have not sufficiently considered the main objects of professional partnerships, nor do partners themselves very often express clearly in their contract the purpose they have in view. If two men work together at a common concern, they must of course share the results, and that whether they so work for a month or twenty years; and partnership contracts generally contain nothing more than an elaborate expression in detail of the *how* and the *time* the results are to be shared. But when a sum of money is paid by one medical practitioner to another, it is in nine cases out of ten paid for a professional introduction; and if this were properly expressed and the introduction properly given, then upon a dissolution, either through incompatibility of temper or from other causes springing from the partners themselves, the selling partner would not incur the risk of losing his practice and his money too.

The principle which Equity applies to these partnerships, when made either for a term of years or at will, is expressed or implied by the words "failure of the consideration." We proceed

to notice a few cases in which this failure is held to take place, and a right to a return of premium consequently arises. Fraud and misrepresentation as to the amount of profits previous to a partnership will entitle the buyer to a dissolution, and to a return of part of his premium. The late Chancellor CAMPBELL decreed a dissolution between two medical men upon this ground. The partnership was entered into for fourteen years, the buyer paying to the seller £750 for the half share. The practice was represented to be worth £800 a year, while it did not reach £400. The buyer got back one-half of the money he paid.

Again, in all cases of misconduct on the part of the selling partner, he incurs the liability to refund. Indeed the liability in such cases commends itself to every man's common sense. It requires not the aid of study or experience in Chancery to understand that a man ought not to be able to take an unfair advantage of his own wrong. He who should take a sum of money for a partnership to-day, whether that partnership be fixed for a period of years or only for so long as the parties choose, cannot to-morrow dissolve without cause, and retain the money. He must refund, and the only question that can arise is as to the amount to be refunded. Within the terms of failure of the consideration and misconduct of the selling partner are included such cases as these:—Non-introduction of the buyer, exclusion from the practice, the surgery, or the books of the partnership, a violation of the articles of the partnership, and dishonourable conduct generally. Any of these would give a right of dissolution and a return of premium. But the question may be asked, and very properly, how is the amount to be returned determined? The answer is, it is in the discretion of the judge. But, as we have seen, from the observations quoted of Sir JOHN ROMILLY, this discretion is based upon an arithmetical basis, where the partnership is entered into for a term of years. When no term is fixed, it must be pure discretion. The rule of three cannot be applied where the third proposition is not given. In the interests of the medical profession, we must express an opinion that the arbitration of two medical arbitrators would be preferable in all cases of dispute where the sole question is the amount of the premium to be returned. They alone could fully enter into the merits of a partnership, consider the nature of the practice and the amount of introduction given, and weigh with competent skill all the minutiæ of medical toil and its results. A judgment given by such men would of necessity be more satisfactory, if not more just, than the discretion of a judge, however learned or profound.

Hitherto we have referred to the fraud or misconduct of the seller; but it must not be supposed that the buyer can do wrong and then demand a dissolution and a return of premium. This would be as repugnant to common sense and equity as to allow the seller to dissolve and retain the money. A partner who buys a share in a practice may by improper conduct give cause of dissolution, and thereby disqualify himself from claiming any part of his money back, and such cases have occurred; and wherever a mutual agreement for dissolution takes place, all right to a return of premium is necessarily waived. Thus it follows that there are equally cogent reasons why, a partnership once formed, the partners should endeavour faithfully to carry out the letter of their articles, or if there are none to act only in such a way as will not afford to each other any grounds for the interference of a court of equity.

We must not leave the subject without referring to the events of death and bankruptcy. Both determine a partnership; and although a contract may be made for a partnership for a term of years, yet the death of the partner who has received the premium will not oblige his representatives to refund any part of it. Upon bankruptcy the result is not so clear. The decisions are conflicting, and the later gave back to the solvent partner the greater part of his money. The partnership was for seven years, and had lasted one year and a half. The purchase money was £900, and the buyer, who was the solvent partner got back £700. He was left in the field of practice undisturbed, and the bankrupt's estate was diminished by that amount. The ground upon which this proceeded was that the contract was for a partnership for a term of years, and that the bankruptcy had caused a failure of the consideration. We have before alluded to the chief object of a professional partnership being the introduction of the new partner; and looking at the subject from this point of view, a return of premium does not seem fair or just.

The preceding observations are sufficient of themselves to show the necessity of articles of partnership being carefully prepared. Those medical men who by years of toil and patience have established a lucrative practice should be careful how they enter upon the matrimony of partnership. The introduction they have gained has been the result of many a long year. Young, hard-working, and skilful, they have begun to climb, and after years have toiled up the heights, upon which they at once place side by side with them the man who comes with his money and buys a share in their practice. In the space of one or two years at the utmost the new-comer has got an introduction into society—has been mixed up professionally and socially with people with whom in the natural course of things he might never have mingled; and if afterwards, upon a dissolution, the seller has to return any part of the purchase money, it is a hard case indeed.

Mr. *Punch's* advice to young men about to marry—"Don't"—is equally applicable to successful practitioners who meditate taking a partner. But if they will enter the matrimony of partnership and receive a premium, let them provide that the money is paid for the introduction—give it—and take care to guard against being required to refund on a dissolution.

Medical Annotations.

"Ne quid nimis."

THE DOINGS AND UNDOINGS OF THE MEDICAL COUNCIL.

A SHARP critic and able physician north of the Tweed has subjected the doings and undoings of the Medical Council to a rigid review. The bare record of their proceedings is in the highest degree suggestive of their present inefficient working.

The expense of the Council meeting for a seven days' *sederunt* is as nearly as possible £185 15*s.* per day, or about £46 5*s.* per hour. The remuneration is scanty enough in relation to the earnings of the men who are brought away from their practice. But this is money taken from the pockets of their own profession. Let us see if any good work is done for it.

The Council had to regulate the systems of education and of examination on a footing of equality; to purge the profession

of its unworthy members; to publish a Pharmacopœia. As to the Pharmacopœia, we reserve a judgment,—merely noting that the Council have probably been rescued from a great blunder by the protest from without against the new confusion of weights and measures; that the Pharmacopœia has cost very heavily indeed in time and money, and is at this moment costing a new Act of Parliament to authorize its publication; that the Council had to seek the aid of men outside their body, such as Farre, Garrod, Neligan, Maclagan, Seller, and Squire; and that, on the whole, it is far from clear that the Colleges could not have done the work as well without the fictive intervention of the Council.

Pass to the other functions of the Council.

In reference to the expulsion of unworthy members of the medical body, the Council have this session formally abdicated their part as prosecutors against persons charged with infamous conduct in a professional respect. They will act only judicially, and prosecutions must be conducted by other public or by private bodies. Hence this part of the Act is now virtually a dead letter. The Register itself they have so mismanaged by becoming their own publishers, that it is the source of heavy loss to them, and is not forthcoming in the public courts when wanted. The loss on the Register for 1861 was £427 19*s.* 10*d.*; for 1862 it was £293 8*s.* 6*d.* Nevertheless, the Council rejected a publisher's offer to undertake the publication for £150 annually, securing the Register a wide circulation, and allowing the Council 2*s.* for every copy sold above 650. We are at a loss to know for what reason it was refused. Meantime, in a place like Halifax, with 40,000 inhabitants, it will be remembered that a medical man was nonsuited in a prosecution for fees because no copy of the Register was forthcoming in the whole town. An attempt is being made to remedy this.

But the most important duty of the Council was to secure equal excellence of education and examination throughout the United Kingdom. Here, too, there is most signal failure. They began by fixing a minimum standard of education, to which all must yield obedience. At first, all went smoothly. The rules for preliminary education were generally improved at all the colleges, and we were able to congratulate the profession on a really important step in advance. Presently, the Council began to particularize, and issued a recommendation that the date of commencing professional studies should be taken as that of entering a medical school. Now the College of Surgeons of England struck horror into the hearts of the Council by absolutely and openly defying them. They deliberately refused to adopt this test regulation, and set the recommendations of the Council at naught. Successive resolutions on the subject were mooted at each of the Council meetings, and after repeated divisions it was mildly resolved to request from the College "such observations or explanations as they may deem fit to offer." Of course the Council refused to adopt Mr. Syme's subsequent resolution:—"That the Council having declined to notice this departure from their requirements, and thus recognised an independent power of action in one of the licensing bodies, it is therefore unnecessary to take any further steps for interpreting the educational clauses of the Medical Act." But it is not the less true that they have virtually resigned the last fragment of power which they possessed. They had already declined to exercise the power of visitation at examinations, and of prosecuting offenders. They now permit a licensing board to dissolve its allegiance, and to undersell those who are more loyal. The limitations of the power of the Medical Council have been carried yet further by the University of Edinburgh, which declined to accept the rule that graduates in Medicine should first go out in Arts; and intimated that it was only "in courtesy to the Medical Council" that they took the trouble of "noticing their recommendation as to the education of medical graduates," and of expressing by resolution their flat refusal to follow it.

Thus the Council has not the shadow of moral power. There must be a serious defect in the composition of a body so respectable in its units but so useless and contemned as a whole. It seems not impossible that the main object of the new Medical Reform Bill which is likely to be prepared by the Council will be to provide for its annihilation as at present constituted, and its entire reconstruction. The system of close council among corporate delegates and Government nominees has confessedly proved a total failure.

POSITION AND PROSPECTS OF THE COLLEGE OF SURGEONS.

THE position and prospects of the College of Surgeons of England are at this moment such as must cause serious anxiety to the well-wishers of that great corporation. Never did that important licensing body stand in a more favourable position than two years since, immediately after the passing of the Medical Act. Embracing in its list by far the greater number of the practitioners of this country, and possessed of a weapon for compelling all who called themselves surgeons to obtain a qualification in surgery; rich in funds, and absolute in power; conscious in the main of just intentions, and trustful of a prosperous future, the Council might be excused for feeling a little of the pride of success. We might point a useful moral by tracing the history of that prosperity, but forbear now to do so. Starting from this region of fair weather, into what a whirlpool have they steered! If the College of Physicians carry out independently and to the full their determination of granting a licence to practise in the surgical as well as the medical and obstetrical departments of physic, the College of Surgeons will be shaken to the foundation. To the general practitioner they will have nothing to offer. By adopting proper means the College of Physicians may render the surgical branch of their examination as satisfactory as the other branches, and the diploma of the corporation in Lincoln's-inn-fields will be wholly unnecessary. Some "pure surgeons" might still desire it as a badge of their order; but if only such support were accorded, the College would die of inanition.

Of course we paint an imaginary picture of distant events. But this is obviously no exaggerated representation of the natural results of the success of the College of Physicians in their present move. The Council of the College of Surgeons have only themselves to blame if the picture should prove true. They will have fallen by their own selfishness, and by the short-sightedness of their policy. During the last two years the College of Physicians have made repeated overtures to the College of Surgeons to join them in granting a general licence to practise. We have chronicled the alternations of these negotiations. The Council rejected all attempts to bring about that desirable arrangement. The late President recently expressed his contempt of public opinion as enunciated in the medical press. He and his colleagues have struck a fatal blow at the welfare of the College by this suicidal disregard. The profession imperatively demand that union of examinations and that unity of qualification, in the general practitioner at least, which we have so long advocated. The Council of the College of Surgeons would not loosen their separate and isolated hold upon the profession; and now they behold the prospect of their emoluments slipping from their hands, and the loss of power and of funds stares this corporation in the face. How this may end we do not care too narrowly to examine at this moment. We would hope that the moment for compromise is not yet past. A perfectly satisfactory arrangement between the two Colleges would secure a unity without threatening the noble foundation in Lincoln's-inn, to which we are all—Council, Fellows, and Members—sincerely attached, however strongly we may differ in opinion as to its management. But one thing is clear, and at that we may heartily rejoice: one way or another a united diploma will be granted in all the three branches of medical education, and a heavy burden will be removed from the shoulders of the general practitioner.

"WOMEN'S RIGHTS."

BY some unaccountable accident, the medical profession is brought, almost alone, into collision with the "rights-of-women" movement. The talk is all about female physicians. It might surely, with at least as much reason, have been about female lawyers, female parsons, female architects, female members of Parliament. The question is not generally put in all its breadth and bearings. It is not simply whether the whole arrangements of our hospitals and colleges are to be modified so as to dub a few ambitious ladies "Doctor," and qualify them for doing obstetric duty and ministering gently to the ailments of childhood. This is only the thin end of the wedge. The question is, whether we are to regard woman as the complement of man or his competitor; whether the female nature is to be brought out from the privacy of the domestic sphere, and enter into hard and public competition with men; whether it is proper and tasteful that women, no longer "keepers at home," should come into the labour market and learn law and physic and architecture and theology and politics, so as to cope, rather than sympathize, with men in all their muscular and mental occupations. Whether or not women are to be physicians is a secondary question, either to us or the public, compared with the question whether they are to cease to be women and to be encouraged in a spirit of dissatisfaction with that restriction of sphere which we have been accustomed to think nature and reason and religion alike impose on them.

It is the habit of the champions of the rights of women to disparage the domestic sphere. We magnify it. In our simplicity we fancy that the training of children, the superintendence of domestics and their operations, and the cultivation of those multiplied home influences which go so far to the making of men and generations, are duties of no mean order. Considering their difficulty, it is, perhaps, not remarkable that these duties have not been discharged with that perfect success which leaves nothing to be wished. There are certainly knotty questions in domestic economy to be yet settled in a philosophic way and spirit, which will require the best brains and the largest hearts that the female world can produce. It will be admitted, for example, that domestic servants are not so perfect as they might be, and that the woman who would point out the defects in their character and the way in which they can be remedied, will save as much pain and deserve as much praise as the discoverer of chloroform. It will be allowed that our homes, happy as they are, might be made more charming still by a deeper study of human nature and a nicer adaptation to varieties. We wish our philosophic fair friends would devote their best powers to these matters before showing such eagerness to invade other spheres of duty and responsibility. When they have discharged duties all their own, they will be looked to with more respect for the discharge of functions not so obviously theirs.

We have pointed out that the duties and responsibilities of ordinary female life require the average female capacity, and that for the highest natures there are higher questions, the solution of which would add incalculably to human happiness. We have in all this associated the female nature inseparably with the domestic sphere, for good reasons. The domestic sphere must be cared for; it must have a responsible head; it is the principal thing we live for, and what we sometimes die for. All great discoveries and changes are important principally as affecting this. For it we prize peace, and for it we go to war. And yet some would-be philosophers would have us believe that this sphere affords but poor exercise for good brains and lofty natures. It is a great sphere, involving great duties; and if our female friends mean to repudiate these, others must enter into their labours, who will seem as much out of place as a lady in the dissecting-room or in the pulpit. For the *error loci* and all its consequences we shall not be responsible. Women—despite the crotchets of a few male-minded ladies—find the domestic sphere highly congenial to their nature and aspirations, and are peculiarly jealous of any interference in it by men. Short of this, even in comfort and competency, they are not satisfied. They long to be heads of a domestic department; and no one who has wisely studied female nature will expect it to be thoroughly contented out of such a sphere. We welcome all culture which recognises the strong bent of the sex; for

> "The woman's cause is man's: they rise or sink
> Together, dwarf'd or godlike, bond or free.
> . . . . . .
> If she be small, slight-natured, miserable,
> How shall men grow? . . . . . .
> . . . . . Let her make herself her own
> To give or keep, to live and learn, and be
> All that not harms distinctive womanhood."

Woman is not man, and cannot be made man. Her glory is to have much to do in the moulding of men; and every proposal in her real interest will recognise this fact, and include a provision for fitting her more perfectly for the function.

THE LUMLEIAN LECTURES ON SURGERY AT THE COLLEGE OF PHYSICIANS.

THERE are many curious facts in the history of the reasons that induced the College of Physicians to contemn Surgery, which their Act of Incorporation, in accordance with the teachings of Galen, Hippocrates, and Celsus, and the practice of the great mediæval School of Salernum, declared to be a part of the *ars medendi*. It is especially interesting at this moment, when the College are about to resume that privilege which they resigned in scorn to the "Corporation of Barbers," to note the insidious manner in which this neglect of duty was covered by a perversion of the funds entrusted to them. This may be done by tracing the records of the Lumleian endowment. That endowment was presented by Dr. Caldwall and Lord Lumley in the year 1582, for the purpose of fulfilling the injunctions of the Charter in respect to Surgery as an operative branch of Medicine—*médecine opératoire*, as is the phrase of our neighbours. Dr. Caldwall was made a member of the College of Physicians in the beginning of Queen Elizabeth's reign, and became president in the year 1570. Zealously devoted to his College, he obtained leave of Elizabeth, in the twenty-fourth year of her reign, to found a *Surgery Lecture* in the College, and to endow it with £40 per annum, which was laid as a rent charge upon the lands of Lord Lumley and Dr. Caldwall and their heirs for ever. The words of the letters patent run thus: "Solvend. eidem Presidenti et Collegio seu communitati et successaribus suis annuatim, ad usum Lectoris Artis seu Scientiæ Chirurgiæ infra domum sive Collegium Medicorum London in perpetuum alend. et manutenend. Juxta Ordinationes et Statuta dicti Johannis Domini Lumley et Richardi Caldwall in Medicinâ Doctoris facto," &c. This gift was so highly appreciated by the College that letters were immediately drawn up and presented to them by the president, Dr. Gifford, in which not only did the College acknowledge its great obligations for this generous gift, most thankfully accepted, but decreed that £100 should be forthwith taken out of their public stock to build more ample and spacious College rooms for the better celebration of this most solemn lecture. Subsequently among the most eminent of the *surgical* lecturers was Richard Forster, M.D. Oxon., who held this office for several years, and in 1601-3 was president of the College; and greatest of all was the immortal Harvey. Harvey held the office of Professor of Surgery until within a few years of his death, and honoured the chair by reading in that capacity and under that title his imperishable lectures "De Motu Cordis et Sanguinis in Animalibus." On resigning the Professorship of Surgery into the hands of that "learned and incomparable anatomist, Sir Charles Scarbrough," he erected at his own cost a library and museum, which he furnished with a variety of *surgical* instruments. In his will he bequeathed his own "silver instruments of surgerie" to Sir Charles Scarbrough. When subsequently the College published Harvey's lectures, they omitted his title of Professor of Surgery, of which he had always been proud, and by a bye

law effected that separation of Surgery from Medicine which they are now about to recant. When the College of Physicians shall have completed this great step towards the fulfilment of their whole duty to the profession, it may be anticipated that they will pay once more due regard to the declared orders of the founders of this endowment "ad usum Lectoris Artis seu Scientiæ *Chirurgiæ* infra domum sive Coll. Med. Lond. *in perpetuum* alend. et manutenend.," &c.; and that the Lumleian Lectures will be devoted to the teaching of Surgery.

THE MEDICAL ACT.—MANCHESTER MEDICO-ETHICAL ASSOCIATION.

THE following petition was presented to the House of Commons on Monday, July 21st, 1862, by Thomas Bazley, Esq., M.P.:—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The petition of the undersigned, on behalf of the Manchester Medico-Ethical Association,

Humbly showeth,—That the Act passed in the year 21st and 22nd Vict., cap. 90, entituled "An Act to Regulate the Qualifications of Practitioners in Medicine and Surgery," and generally cited as "The Medical Act," has, after four years' experience, been found inadequate to the requirements of the medical profession, and the welfare of the public.

That whereas the preamble to the said Act states, that "it is expedient that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners," the Act itself fails to define the titles and qualifications of such practitioners.

That one great feature of the "Medical Act" having been the formation of "A General Council of Medical Education and Registration," yet a recent instance seems to show that there are no satisfactory powers to compel the various licensing bodies to conform to the requirements of such Council.

That whereas the Act forbids the assumption of medical titles by unqualified and unregistered persons, the 40th Clause has been decided by the Judges of the Higher Courts to have failed in its intentions, and to be inoperative.

That whereas the 36th Clause forbids the appointment of unregistered persons to public services,—hospitals, clubs, emigrant vessels, and in other ways,—no provision has been made whereby this clause can be enforced.

That although the said Act professes to protect "persons requiring medical aid" from incompetent and unqualified persons, yet it nowhere attempts to prevent or *prohibit* the practice of medicine or surgery by such incompetent or unqualified persons.

That a competent knowledge of both medicine and surgery is indispensable to the practice of the medical profession, and yet the Act allows persons to register who may have undergone the test of fitness by examination in one of the branches of the profession only.

That the word "*surgery*" is very commonly used by unqualified and unregistered persons as a public inscription or sign on or about their dwellings or places of business, thereby misleading the public whom it is the intention of the Medical Act to defend, and the said Act contains no provisions to meet this evil.

That offences under the penal clauses of the said Act are provable by "implication" only, which is generally deemed unsatisfactory by the Judges.

Your petitioners therefore humbly pray,

That in consequence of the above-cited and other deficiencies in the said Medical Act, and its admitted failure after four years of patient trial and experience of its workings, your Honourable House will give its attention to the subject, and devise such measures to prevent existing abuses as shall, in its wisdom, seem most fit.

And your petitioners will ever pray, &c.

JAMES LOMAX BARDSLEY, Knt., M.D., *President.*
JOSEPH STONE, M.D., } *Hon. Secretaries.*
JONATHAN WILSON, F.R.C.S., }

Manchester, July 18th, 1862.

*** The complete failure of the most important clause of the Medical Act is inflicting the greatest injuries upon medical practitioners. In order to effect an amendment of its provisions, it is absolutely necessary that the profession should bring its influence to bear upon the Government through the members of the House of Commons. The Manchester Association has set an example which, it is to be hoped, will be followed by the various medical associations throughout the kingdom. Petitions from individual members of our body would, if forwarded to their representatives in Parliament, be productive of benefit. It is evident from the course hitherto pursued by the General Medical Council, that we have nothing to expect from them; indeed it is questionable if the institution of that body has not been detrimental to the progress of wholesome reform. As was proved incontestably in THE LANCET last week, the Council represents certain corporations and vested interests, and not the medical practitioners of this country. We must act, therefore, totally independent of our so-called government. To succeed in amending the Medical Act it is only necessary that the example of the Medical Association of Manchester should be earnestly, energetically, and generally followed.—ED. L.

THE GREAT INTERNATIONAL EXHIBITION.

XII.

REPORT ON SURGICAL INSTRUMENTS.

THE orthopædic contrivances employed in surgery are now so numerous and complicated as to exercise the ingenuity of quite a special class of surgical mechanicians. The orthopædic instruments shown from England are both more numerous and complete than those from any other country, although Béchard (in France), Nyrop, Rasmussen, and others, exhibit some very well devised instruments, which we propose to notice.

The requirements of special cases differ so much that it is difficult to lay down general laws respecting the relative qualities to be looked for in orthopædic instruments. But we may say that judgment must be founded upon the following considerations. The instruments should be as light as possible; they should be so arranged that their mechanical centres of motion should correspond in situation with those of the body; and the number and variety of movements in each joint of the body should be correlatively represented or checked in the joints of the instruments. With these hints, the surgeon, on examining the cases, will find many instruments, highly polished and ornamented, which deserve only condemnation; and even eminent makers show here instruments of such weight and clumsy construction, that they could neither be worn with comfort nor concealed when worn. Avoiding the task of condemning these, we will refer to a few which are well constructed, and belong to later years in their design.

The most important collections are those of Mr. Heather Bigg and Mr. Ernst. The apparatus of the last-named maker are unrivalled for all the qualities of true excellence in orthopædic instruments; for lightness, ingenuity, and perfection of finish they are not to be surpassed. Mr. Bigg shows an admirable series of models reduced to scale, which illustrate the whole range of his art, and are valuable as a technological series of the highest merit, which would usefully and instructively adorn the museum of some large school after the Exhibition shall have closed.

Mr. Bigg arranges his series in anatomical order. One of his instruments for the region of the head or neck is a new form of "Minerve" for the treatment of torticollis.

The difficulty which pertains to all forms of instruments intended for the correction of wry neck arises from the spheroidal form presented by the head, which thus enables it to rotate, unless the lateral grasp of the instrument is so great as to become exceedingly painful. To remedy this the instrument

here figured has been devised, the prominent features of which are that it rotates the head horizontally by pressure against the inferior maxillary surface of the face, whilst laterally it restores the vertical position of the head and neck by pressure against the opposite parietal bone. It consists, as will be seen in the drawing, of a padded pelvic band, having a vertebral stem, with horizontal arm-pieces. At the superior extremity of the vertebral stem a neck-lever is fixed in such a manner as to be attached and detached at will, and it is so curved as to pass around the base of the skull, and take its bearing against the temporal bone on that side towards which the head is deflected, whilst a horizontal lever rests against the inferior maxilla on the opposite side. The forehead or parietal lever has a vertical axis moved by a ratchet joint, upon turning which the head is gently pressed from right to left, whilst the chin or maxillary lever has a horizontal motion, which rotates the head upon its vertebral axis. The conjoined action of these two forces replaces the rotated chin in the mesial line of the body, and restores the vertical position of the head by expanding the sterno-mastoideus muscle.

FIG. 33.

The following apparatus, suggested by Mr. Brodhurst, for lateral curvature of the spine, is constructed in strict obedience to the mathematical position occupied by the centres of each vertebral curve. These axes are the point of junction between the lumbar and dorsal curves and the sacro-lumbar articulation. The instrument (Fig. 34) consists of a padded pelvic band, en-

FIG. 34.

circling the hips, and affording an attachment on each side to a lateral crutch for the arms to rest upon. At the posterior centre of the pelvic band a perpendicular lever, representing the direction of the spinal column in its normal condition, is affixed, being firmly attached to the uprights by a transverse bar passing across the shoulders, and giving stability to the whole artificial frame. At the base of this vertebral stem, and coincident with the sacro lumbar articulation, a ratchet lever is placed holding a padded plate, which takes its bearing against the arc of the lower or lumbar curve. At that point in the vertebral stem which agrees with the junction of the two spinal curves (dorsal and lumbar), another ratchet lever and plate are attached, which plate rests on the highest point of the dorsal curve. Thus the direction of force becomes equal and opposite; but from one plate being above the other, and both coincident with the displaced surfaces, their resultant action is to uplift and unfold the abnormal spinal deflection. There is also a hinged ratchet plate, acting against the uplifted ilium, and tending gradually to depress it. The whole plan is novel, scientific, and ingenious.

Another spinal apparatus, exhibited by Mr. Bigg, is intended to overcome lateral curvature when accompanied by rotation of the ribs on the bodies of the vertebræ—a condition which, as Mr. Wm. Adams pointed out in his important pathological researches, frequently complicates spinal curvature. It consists of a padded pelvic band, with two lateral crutches, having at its posterior centre a vertebral lever, giving attachment to a plate which rests upon the arc of dorsal curvature. This vertebral stem is furnished with two rack-and-pinion movements: one acting anteriorly, the other laterally. The dorsal plate has also two rack-and-pinion movements: one moving horizontally, the other vertically. (Fig. 35.) The united effect of this ingenious distribution of mechanical motion is that of acting simultaneously on the rotated ribs and deflected spine. The plate moves in a manner similar to that of the human hand when grasping and pressing obliquely forwards a distorted spine. It will be seen that the principle of treating

FIG. 35.

lateral curvature by oblique and rotative motion is here adopted.

Some praise may be given here to an instrument exhibited by Mr. Bailey of Oxford-street, for which, and for his abdominal truss, he has received a medal. It consists of a pelvic band, to which are attached two uprights, terminating in padded cushions, which enter the axillæ. To these uprights are attached racks and pinions, by which the whole body can be

FIG. 36.

moved in any direction. There is also a bar passing up the back, to which a flat pad is fastened: this pad is intended to press upon the convexity usually observed in lateral curvature. There are three different motions in the back bar. The mode of fastening the lateral plate is by a handsome steel bar cut in a floral device. The uprights are made of an oval form, as that form is the strongest with the least material. The intention has been to supply an instrument as light as possible consistent with strength, and as little repulsive in appearance as it can be made.

SUICIDES.—The juries on coroners' inquests in England and Wales found 1324 verdicts of suicide last year—one in every 329 deaths. Of these, 961 were men and 363 women.

Correspondence.

"Audi alteram partem."

CONSULTATIONS WITH HOMŒOPATHS.

To the Editor of THE LANCET.

SIR,—It will be in the remembrance of your readers that Dr. Clay, in his letter to THE LANCET of May 31st, in reply to "Inquirer," challenges the latter in the following words:—"If your correspondent, instead of crediting reports, will make a distinct and positive charge, and have the manliness or honesty to attach his real name to it, I will afford him all the information he seeks."

I felt, as the writer of the letter signed "Respondent," that Dr. Clay's challenge applied to me as well as to "Inquirer," and on the faith of that challenge I communicated to THE LANCET of July 19th the particular information that had reached me respecting Dr. Clay's consultation with a homœopathist, and prefaced that account with the following sentence: "Dr. Clay has certainly a right to the particulars, when he is charged with what most medical men consider a grave breach of medical etiquette, so that he may have an opportunity of explaining away or rebutting that charge. And for myself, I shall have the utmost satisfaction in making the *amende honorable* to Dr. Clay if he can do the one or the other."

I fully expected after that, that Dr. Clay, as Mr. Fergusson and Mr. Adams had done in the same circumstances, would have condescended to give us his views of the course ascribed to him, or have denied or corrected the information. And indeed, in one particular, my communication was susceptible of correction; for the consultation referred to, which was witnessed by my informant, concerned not his wife, as I then supposed, but another lady. Instead of taking this usual and natural course, Dr. Clay takes the unprecedented step of threatening me with an action at law. I think I have reason to complain of this proceeding; and I publish the following correspondence that your readers may judge whether it is with good reason or not.

I am, &c.,
WM. ROBERTS, M.D.

Manchester, July 28th, 1862.

No. 1.

From Mr. BENNETT, *Solicitor, to* Dr. ROBERTS.

16, Kennedy-street, July 22nd, 1862.
(Received July 23rd.)

SIR,—I have been consulted by Charles Clay, Esq., M.D., respecting two letters which have appeared in the medical publication called THE LANCET: one, signed "Respondent," in the publication of the 24th of May last; and the other, signed with your own name, and appearing in last Saturday's impression, and in which you acknowledge yourself to be the writer of the first-mentioned letter.

As the object of the first, and indeed of both letters, is to make a direct and unwarrantable attack upon the professional reputation and conduct of my client, and there is a clear and unmistakable attempt to injure or prejudice him in his profession, and to degrade him in the estimation of his professional brethren by exposing him to their contempt or ridicule, I am instructed to say that unless you in the course of to-morrow make a suitable apology for your unjustifiable conduct, and publicly acknowledge the falsity of your statements, and pay my charges, legal proceedings will be instituted against you for redress.

You cannot fail to see that this is a matter of vital importance to my client, and I do hope that your own sense of justice will prompt you to comply with my requirement, so as to prevent further expense and unpleasantness, which will be the inevitable result of an appeal to a legal tribunal.

I am, Sir, your obedient servant,
ROBT. WM. BENNETT.

W. Roberts, Esq., M.D., Oxford-road.

No. 2.

REPLY TO NO. 1.

From Dr. ROBERTS *to* Mr. BENNETT, *Solicitor.*

No. 10, Chatham-street, Piccadilly, July 23rd, 1862.

SIR,—I acknowledge the receipt of your letter dated yesterday. In reply, I beg to state that as the subject is one that concerns the profession generally, and is not of a personal character, I have placed your letter in the hands of Dr. M. A. Eason Wilkinson and Mr. George Southam, who have consented to act for me.

If you have any further communication to make on the subject, I refer you to them.

I am, &c.,
WM. ROBERTS.

R. W. Bennett, Esq.

No. 3.

From Mr. BENNETT *to* Dr. ROBERTS *in reply to* No. 2.

16, Kennedy-street, 24th July, 1862.

SIR,—(yourself and Clay)—I am in receipt of your favour of yesterday's date, and am instructed to say that the subject upon which I have written to you does not concern the medical profession generally, but is purely one affecting yourself and my client only; and that as you impliedly decline to comply with my requirements, I must now ask you to refer me to your solicitor, my client having determined to institute proceedings forthwith.

By doing this you will spare yourself the annoyance of being personally served with a writ.—I am, &c.,
ROBT. W. BENNETT.

W. Roberts, Esq., M.D., 10, Chatham-street.

No. 4.

From Dr. ROBERTS *to* Mr. BENNETT, *in reply to* No. 3.

10, Chatham-street, July 25th, 1862.

SIR,—As my communications to THE LANCET, of which Dr. Clay complains, have sole reference to points of medical etiquette, I much regret, both on public grounds and for the sake of Dr. Clay himself, that he should prefer having recourse to legal proceedings, instead of, as is usual in such cases, submitting the matter to the judgment of the profession generally, or to the arbitration of mutual medical friends.

Presuming that this closes the correspondence with you, I have only to add that the letters which have passed between us will be forwarded to THE LANCET for publication, and that the names of my solicitors are Messrs. Earle and Son, of this town.

I am, &c.,
WM. ROBERTS.

R. W. Bennett, Esq.

To the Editor of THE LANCET.

SIR,—I should feel obliged by your inserting the following correspondence between the North Staffordshire Medical Society and Dr. Clay, of Manchester.

I am, Sir, yours truly,
W. HASLAM DAVIS, M.R.C.S.,
Hon. Secretary, North Staffordshire Med. Society.

Hanley, June 21st, 1862.

SIR,—I take the liberty of writing to you at the request of the North Staffordshire Medical Society, of which I am secretary.

At a meeting held at the Railway Hotel, Stoke-upon-Trent, on the 12th of June, a letter signed "Inquirer," which appeared in THE LANCET of May the 17th, with your reply in THE LANCET of May the 31st, were brought before the Society.

As your reply to the charge made by "Inquirer," of having met in consultation a professed homœopath, was considered unsatisfactory, I was instructed to write to you, asking an explanation of the circumstance, and, should you favour me with an answer, to forward it, with a copy of my letter, for insertion in THE LANCET.

I remain, Sir, yours respectfully,
W. HASLAM DAVIS.

Dr. Clay.

On the 24th of June the following reply was received:—

101, Piccadilly, Manchester, June 23rd, 1862.

SIR,—I am disposed to think the Medical Society of which you announce yourself secretary is asking too much from me to reply to any anonymous writer, even though his name be handed over in private to the Editor (for *his* satisfaction, not mine). If "Inquirer" had written at once to me as a gentleman, I would gladly have furnished him with all he wished for, and I hope fully satisfactory. To him I must repeat what I have said before—Unless the charge be made and signed truthfully, I have no explanation. On the contrary, if the Society will ignore their *anonymous member* and apply to me on their own grounds, I will at once give the desired explanation.

I am sorry to put you to the trouble of further correspondence, but I consider the attack anything but gentlemanly, and I hope to see the Society freed from the patronizing anonymous writers.

I am, Sir, yours sincerely,
CHAS. CLAY, M.D.

W. H. Davis, Esq.

Hanley, July 19th, 1862.

SIR,—At a meeting of the North Staffordshire Medical Society, held July 17th, it was resolved—

"That Dr. Clay be informed that the letter of 'Inquirer' was mentioned in the Society's former communication merely to call his attention to the particular statements therein, which are generally known, and of which the Society desired some explanation."

"That the Society did not act on behalf of 'Inquirer,' but entirely on their own responsibility."

"That as Dr. Clay has expressed his willingness to answer any inquiries the Society may wish to make, they beg to call his attention to the *Homœopathic Observer* for July 15th, in which the case is alluded to; and they hope it will be in Dr. Clay's power to offer some explanation satisfactory to the Society."

"That as copies of the *Homœopathic Observer* have been forwarded by post to several members of this Society, they take the liberty of enclosing one for Dr. Clay's perusal."

I am, Sir, yours faithfully,

W. HASLAM DAVIS, *Hon. Secretary.*

To this Dr. Clay replied:—

101, Piccadilly, Manchester, July 20th, 1862.

DR. CLAY encloses the address of his solicitor* for any further communications, that gentleman having full instructions to proceed immediately against all parties connected with THE LANCET and other correspondence respecting him. Dr. Clay having waited nearly a month to allow "Inquirer" the opportunity of making an open and honourable application, the consequences rest with himself and those under whose direction he acts. The Society will have ample opportunities of explaining the character of its connexion with "Inquirer."

To the North Staffordshire Medical Society.

* R. W. Bennett, Esq., 16, Kennedy-street, Booth-street, Manchester.

On this letter being laid before a meeting of the Society, held on the 24th of July, it was unanimously resolved—"That the correspondence with Dr. Clay be closed, and forwarded to THE LANCET for publication."

To the Editor of THE LANCET.

SIR,—The correspondence between "Inquirer," the North Staffordshire Medical Society, and Dr. Clay being now published, perhaps you will kindly allow me to give my reasons for so long concealing my name.

There was a report in Hanley, which must have been current some little time before I heard of it, that a homœopath had had a difficult labour, and been obliged to telegraph for help, which difficulty, however, had been got over by the mother giving birth to a child "homœopathico absente."

This was mentioned at a party where a few medical men were present, when a non-medical man stated that it was a Dr. Clay who had been consulted, but thought the report of the circumstances under which he had been called in had not been quite correctly stated, which proved to be the case.

At first it was supposed to be impossible that Dr. Clay could have acted so unprofessionally, but on being positively assured that such was really the case, it was considered to be an act of so much injustice to the professional men of this neighbourhood that it ought to be made public.

Different suggestions were made, and I adopted the form which appeared in your impression of May 17th, signed "Inquirer."

The answer to it from Dr. Clay a fortnight afterwards was so evidently a mere evasion of the question, that, as it was a public and not an individual affair, I laid the matter before the North Staffordshire Medical Society, when the correspondence now published ensued.

The Society, I think very wisely, refused to give up my name; but, sinking the individual, took the inquiry upon themselves as a body; and of course, under the circumstances, it would not have been behaving properly to them to have revealed my name, although threatened with the heaviest penalties for not doing so.

I can only now say, that if, after reading this statement and correspondence, you think that I have done anything deserving of censure, I shall be most happy to apologize to Dr. Clay. The case is before the public; let them be the judges. In the meantime, perhaps you will allow me to call attention to an attack upon the Infirmary and regular practitioners, which was issued by the homœopathists of this town, in the form of a dispensary report, which, besides being absurdly acrimonious, placed the idea of a consultation between two of the opposite creeds in such a ridiculous light, that one hardly knows which to be most surprised at, Dr. Clay, or the homœopath who, after a good round of scurrilous abuse, could actually call in, and consult with, one of the party he had so vehemently denounced.

The following is a quotation from the annual report of the Hanley Homœopathic Dispensary:—"Of course the practitioners of the opposite treatment cannot *consistently* meet in consultation to devise means to relieve a patient in extremity, simply because no homœopathist would consent *to see his enemy's dog*, much less his patient, brutally and barbarously abused by bad treatment."

Further on, after a bungling attempt to show that regular practitioners are extremely jealous of homœopathy, the following passage occurs:—

"Men do not work themselves up into a state of effervescent indignation, disport themselves at the mention of homœopathy as a ball does before a red rag, and nickname successful rivals, without sound reasons."

Comment on this gentlemanly style of logic is of course unnecessary; it only shows the true character of those we have to deal with.

One more quotation from this *refined* little *brochure*, concerning the press, and I have done. The author, after giving up about a page to homœopathic compliments on the general features of the medical press, consoles himself thus:—

"The periodical attacks of *flatulent rage* with which THE LANCET is seized would be alarming were they not perfectly impotent. Nor must we forget 'our insane correspondent' of the *British Satirist*, who announces *another paroxysm of drivelling vacuity* by the incoherent utterance of a feeble jokelet against homœopathy."

After receiving this exponent of homœopathic etiquette, which was sent per post to the members of the profession individually, and distributed most liberally throughout the Potteries, you cannot be surprised that the physicians and surgeons of this district should on all occasions refuse to meet homœopaths, and feel annoyed that Dr. Clay should adopt such an opposite course.

Let every man enjoy his own creed; I wish to interfere with nobody. If homœopaths will only practise *homœopathy*, and not make improper use of our practice, which they represent as so opposite to their own, the profession never need fear the result; but it seems to me a matter of medical etiquette that the two should not inflict upon any patient the expense of a consultation, which at the best must be a mere farce.

I am, Sir, yours very truly,

Hanley, July, 1862. W. H. FOLKER, M.R.C.S.

MORTALITY FROM TYPH FEVER.

To the Editor of THE LANCET.

SIR,—I am shocked to see and hear of the great mortality this summer from typh fever. I wish those who experience it in their practice would adopt the "Mackenzian" treatment. The way I have applied it is as follows:—

In all cases:

1. *An emetic* is given if the patient is within the first week of the illness.
2. Half an ounce of *hydrochloric acid* is administered daily, in twenty-minim doses, in sugared water.
3. *Sponging* with tepid water, or vinegar-and-water, over the whole body is performed three or four times a day.
4. Half a gallon of *liquid nutriment* is given daily in divided doses; milk and strong beef-tea are the usual vehicles, given in cup doses every hour or two night and day.

In special cases:

1. *Jacket poultices*, occasionally *cupping* or *leeches*, where there is pneumonia.
2. *Poultices, fomentations, leeches*, where there is inflammation of bowels.
3. *Wine*, in two or three large doses daily (but never in small divided doses), where the delirium is constant through the day, or the prostration is more excessive than usual, or the patient has been a drunkard.

I wish they would adopt this treatment, because during the five years I have done so I have not lost a single patient that has had that treatment for thirty-six hours.

During those years the form of eruption in the cases admitted to St. Mary's has been various. Till lately the majority have had rose spots, but during this year the majority have been livid-spotted. In some the eruptions have been mixed; one man, now convalescent, was entered by those who wished to persevere in the old-fashioned distinctions as a case of *typhusoid*, for he had typhoid spots on his trunk, and purpuric typhous spots on his limbs. But, whatever the form, the same treatment seemed equally beneficial to all.

Believe me, Sir, your obedient servant,

THOS. K. CHAMBERS, M.D.,
Brook-street, Grosvenor-square, July, 1862. Phys. St. Mary's Hosp.

MR. SYME'S LATE CASE OF ILIAC ANEURISM.

To the Editor of THE LANCET.

SIR,—In answer to Mr. Syme's reply in the last number of your journal, we beg distinctly to state that no such opinions as those expressed in the man Lattimer's letter were ever held by us or communicated to the patient, and we cannot but regret that Mr. Syme should have regarded them sufficiently trustworthy to justify him in making the statement which he did.—We remain, Sir, your most obedient servants,

WILLIAM SCOTT, M.D.
Dumfries, July, 1862. ALEX. BORTHWICK, M.D.

MURDER OF A POOR-LAW MEDICAL OFFICER.

To the Editor of THE LANCET.

SIR,—Your kind insertion of my letter relative to the terrible death of poor Mr. Puckett, together with your leading article on the subject, have, I am happy to say, induced about a hundred and fifty medical men, and a hundred of the nobility, members of Parliament, gentry, and others, to forward nearly £400 in aid of the fund for the support of the widow and family of the deceased; but as the interest from this sum, when invested, will be quite inadequate for their support, I am reluctantly compelled still further to urge their claims on the sympathy of the profession and public at large, and trust that a larger sum may yet be forthcoming, as, after the debts of the deceased are paid out of his own property, there will only be left from that source a very few pounds; the family, in fact, are literally dependent on what we may raise for their support, as the widow's state of health precludes her doing anything.

At his trial the maniac pleaded Guilty, at the same time saying, "I can't recollect." The judge thereupon directed "a plea of Not Guilty to be recorded." The prisoner was then tried, and a verdict returned of "Not guilty on the ground of insanity," and he was ordered to be detained during her Majesty's pleasure.

Subscriptions by cheque, post-office order, or stamps, may be forwarded to me, or to Messrs. Eliot's Bank, Messrs. Williams' Bank, or the Wilts and Dorset Bank, all of Weymouth. Col. Gilpin, M.P. for Bedfordshire; the Rev. E. C. Headland, rector of Broadway, where the deceased resided; the Rev. Talbot Baker, vicar of Preston, in which village the murder was committed; and other gentlemen, have kindly consented to act as trustees, and therefore no fear need arise as to the proper application of the money.

I am, Sir, yours, &c.
Royal-terrace, Weymouth, July, 1862. RICHARD GRIFFIN.

*** We are gratified to find that the subscription in favour of Mr. Puckett's family has progressed so favourably. The following sums have been transmitted to THE LANCET Office. Further subscriptions will be duly acknowledged:—

THE LANCET	£2	2	0
F. Seymour Haden, Esq.	1	1	0
Bishop of London (per F. S. Haden, Esq.)	2	0	0
C. A. Cole, Esq. (per ditto)...	1	1	0
Dr. Wiblin	1	0	0
I. B. Brown, Esq.	2	2	0

THE INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Much as you have at various times been troubled with our complaints, you possess and have shown at all times so strong a desire to see your brethren righted, and must feel, moreover, so much interest in professional brothers banished as we are, that I will not apologize for again addressing you.

A crisis in our fate has arrived; and now is the time, if we have any parliamentary or influential friends at home, for them to afford us their sympathy and assistance.

Colonel Balfour, the Military Financial Commissioner, has, we are led to believe, drawn out a scheme for our future pay, promotion, and pensions for retirement, which, in the opinion of the favoured few who have seen it, is not only fair, but even liberal; and how strong must be our claim to some alteration in our favour I leave you to imagine, when the change has been suggested by a man described, in the *Friend of India*, as "the most hard-hearted, close-fisted man the Government could find to carry out the numerous retrenchments necessary to save a bankrupt empire." Yet, while saving £4,000,000 to the Government in our military expenditure, he has expressed it as his opinion that the medical officers are *grossly underpaid*; thus adding the weighty opinion of a shrewd, sensible economist to the already warm advocacy of our claims by Lords Dalhousie and Canning, Sir Henry Lawrence, and Sir J. Outram.

But unless our friends, especially those in Parliament, assist us, the measure—like almost every measure which from time to time has been suggested for our assistance—will be burked; and, through your pages, I do pray any and every man who has himself any authority, or interest with those who have, to stir himself so that some pressure may be put upon our present Secretary of State for India.

What is our present position? Since the assumption of India by the Imperial Government, our promotion, slow enough before, has virtually stopped. Our (Madras Army) senior assistant surgeon is of *over eighteen years' service*. Our pay, small enough before, is, by clippings here, there, and everywhere, getting less and less. Income-tax, funds, &c., paid, the surplus leaves to us married men barely sufficient for the necessities of life; for it must be remembered that while all native products, servants' wages, &c., have tripled in cost during the last five years, all English articles have had 20 per cent. duty clapped upon them.

With our present miserable pay, saving is utterly out of our power; most of us must be in debt. How any of us who have been allured to this splendid clime to make our fortunes are ever to return to England, I cannot tell. Our pension of £192 after eighteen years' service will not enable us to do so; saving a passage home, with our present pay, is hopeless; and the old prizes—garrison surgeoncies, superintending surgeoncies, and medical boards, which did enable the older men to make a purse before retiring—are nearly all gone, and the rest are going. Really, we have fallen on unfortunate times; and unless Colonel Balfour's scheme or something else is done for us, we are undone.

If, the old Ragh being done away with, we are no longer wanted by the new—good; let us go. *But let us go fairly.* We were wanted when we were hired, and we came under certain prospects. *We* have done our work well—at least so say Dalhousie (and he never praised lavishly), Canning, Lawrence, and Outram: do not leave us to drag on a miserable existence in this country, our present destroyed, and no future held out to us. If it is our destiny to be paupers, let us be paupers in England. Pay our passage home, and give us all pensions or gratuities according to the length of our services. Some of us might still find a nook to do our work in like men; and to such of us as are worn out with sickness and broken hopes—and we are not a few,—to die and be buried in English soil would be some poor consolation.

I am, Sir, yours respectfully,

Madras, May, 1862. DELTA.

INDIAN HILL STATIONS.

To the Editor of THE LANCET.

SIR,—In your issue of the 22nd of March last, there is a leading article on "Indian Hill Stations," in which is given an extract from an address stated to have been delivered at the opening of the Army Medical School at Chatham, in October, 1861, by Deputy Inspector General Maclean, Professor of Military Medicine.

I feel certain that Dr. Maclean would not willingly have misrepresented the amount of sickness and mortality on the hills or plains; but it is evident that his figures have been derived from unreliable sources, or that his statements before the military class at Chatham have been misreported. In either case it is desirable that the truth should be put before the public in a clear light.

The portion of the address to which I take exception is the following:—"At Jackatalla, on the Neilgherries, a battalion

of the 60th Rifles, lately quartered there, had only 1 per cent. in hospital; and during the last year of their stay there, the death-rate from disease was a fraction over 2 per 1000 of strength. Contrast this with the fate of the Royals at Secunderabad, where they lost in less than eighteen months 300 men from dysentery alone."

These figures under-estimate the losses on the hills as much as they exaggerate the mortality at Secunderabad (a station 1800 feet above the sea, on the table-land of the Deccan). The following tables are taken from official records, and may be depended upon as accurate:—

TABLE I.

H.M.'s 3rd Battalion 60th Rifles, at Wellington (6500 feet above the sea).

Years.	Strength.	Admissions.	Deaths.	Sick to strength, per cent.	Deaths to strength, per cent.
1859-60	1137	1037	10	91·2	0·8
1860	698	506	16	72·4	2·2
1861	914	450	13	49·2	1·4
Total	2749	1993	39	72·4	1·4

To include the very severe outbreak of malignant dysentery to which Professor Maclean alludes as causing such fearful havoc in the 1st Royals at Secunderabad, I have been obliged to go back for another year and take in the returns of 1858–59.

TABLE II.

1st Battalion, 1st Royals: Secunderabad, one year; Tremulgherry (new barracks on high ground within the cantonment of Secunderabad), three years.

Years.	Strength.	Admissions.	Deaths.	Sick to strength, per cent.	Deaths to strength, per cent.
1858-59	1146	2194	108	191·4	9·4
1859-60	1045	1731	34	165·5	3·2
1860	680	1058	11	155·5	1·6
1861	947	1201	10	126·8	1·05
Total	3818	6184	163	161·9	4·2

These simple tables will show very conclusively that the Professor's figures are very wide of the mark. Instead of the 1st Royals losing 300 men in eighteen months, the corps has in *four years* lost only 163 by deaths in hospital. If the decrement by invaliding for the same period be included, the total loss is still less than 300 in four years, instead of amounting to that number in eighteen months.

The sickness and mortality in the 1st Royals from dysentery in the period alluded to was as follows:—

		Treated.	Died.
1858-59	Dysentery, acute	494	23
	,, chronic ...	202	43
1859-60	,, acute	178	0
	,, chronic ...	247	14
Total		1121	80

I do not wish to enter now upon the causes influencing the sad outbreak of dysentery; but there are good grounds for believing that it and the fevers, and hepatic diseases, which prevailed simultaneously with the dysentery, were much aggravated by defective sanitary arrangements, such as are not likely to occur again in any station where troops may be quartered.

The death-rate of the 1st Royals at Secunderabad for the years 1860 and 1861 contrasts very favourably with that of the 60 Rifles at Wellington for the same period; the numbers being—Wellington, 18 per 1000; Secunderabad, 13 per 1000. A perusal of the table allotted to the latter corps will show that the proportion of sick treated was very small. Besides the invigorating effects of the cool mountain air upon a body of young growing lads, the sick list on the hills was much diminished by—firstly, the difficulty of procuring on the hill plateau access to liquor beyond the quantity obtainable from the canteen; and, secondly, the very small amount of venereal disease at the station, resulting partly from the scarcity of prostitutes, and partly from the efficient medical police supervision of those few who followed the camp to the hills.

The death-rate of the troops on the hills is not remarkably low. While the 74th Highlanders occupied Wellington, it averaged 35 per 1000 per annum. Since the completion of the new barracks, and during the time the 3rd Battalion of the 60th Rifles occupied the station, it was at the rate of 14 per 1000 of strength, *not* "a fraction over 2 per 1000," as Professor Maclean is reported to have stated. This death-rate—14 per 1000 of European troops—is higher than what now and then occurs in many of our low-country stations: at Bangalore, Trichinopoly, Jaulnah, Secunderabad, Rangoon, and Tonghoo, for instance. In the year 1861 the deaths at Secunderabad, among an average strength of 3500 European troops, only numbered 44, or at the rate of 12 and a fraction per 1000. In Rangoon, Bangalore, and some other places, the death-ratios were even more favourable than this. So far as I know, the returns of the station at Jaulnah, in the Hyderabad country, show the lowest *permanent* death rate of any station in India, whether of hills, plains, or sea-coast. For a long period of years a troop of European Horse Artillery was stationed there, and the deaths did not quite amount to the rate of 10 per 1000 per annum. It is evident from these facts that the question of locating all our troops on hill stations cannot at present be settled on medical or sanitary considerations alone.

The experience gained by placing the 3rd Battalion of the 60th Rifles on the hills is very valuable. It shows that inefficiency from sickness can be reduced to a very great extent. At the same time it must not be lost sight of, that if hill stations are to be generally used for European troops, the attendant evils of all large collections of military will not be absent as they have hitherto been, and that the chances of an increase in "enthetic" diseases are but too problematical. From the diseases fatal to life, hill stations possess no immunity. Cholera has not yet prevailed as an *epidemic* on the Neilgherries, but several cases have occurred there, and an epidemic visitation is by no means an improbable occurrence. Fevers and dysentery at certain seasons do prevail, and cause the greatest mortality.

I do not allude to your observations on the abandonment of the barracks at Wellington, except to say that your informant has been sadly misleading you, and that the Madras Government never contemplated their being used otherwise than for the benefit of the British soldier. Whether the barracks should be used simply for one regiment, or whether the unformed recruits and debilitated men of *the whole army* should benefit by a residence in such a climate, is a matter on which much difference of opinion may be presumed to exist. In the mean time some six hundred troops are escaping the heat of the plains, and enjoying all the advantages of a hill residence; and there appears to be every probability of the number being increased very shortly to a thousand.

With apologies for thus obtruding upon your space,

I have the honour, to be, Sir, your obedient servant,

WM. ROBT. CORNISH,
Staff Assistant-Surgeon, and Secretary to the Principal Inspector-General, Madras Medical Department.

Madras, May, 1862.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

ALL Paris is "aux eaux;" the healthy pleasure-seekers at Baden and Spa; the sick and sorry at Aix, Carlsbad, or Vichy. A literary friend of mine, who repairs each summer to the latter place, in order, as he terms it, to "settle his wine-account," unceasingly expresses his wonder at the small number of English drinkers at the "Grande Grille." "What!" he exclaims, "*you*, the goutiest nation in the world; *you*, who can chalk up your own names on the door with your knuckles; you ignore Barthez and the Celestins! Mais c'est de la folie." "Tell them," adds he, "dites donc aux Coquenez, that an annual stay of twenty-one days at Vichy means immunity from gout, and leaves a margin, moreover, for endless civic feasts and west-end banquets."

The late M. Adelon, who for thirty five years filled the chair of medical jurisprudence in the Paris Faculty of Medicine, and whose death, at the advanced age of eighty, I chronicled last week, was a native of Dijon, in Burgundy. In early life a pupil of Chaussier, then professor of anatomy in the Academy of that town, he accompanied his master to Paris, and, stimulated by his counsels, devoted all his energies to the study of

physiology. We find him at the outset of his career, and previously to taking his degree, publishing a critical analysis of Gall's lectures on the Physiology and Anatomy of the Brain—a work in which is contained a sensible exposition of the exaggerations of phrenology. In 1826 he took possession of his chair in the Faculty, and for the space of thirty-five years rendered faithful and efficient services to science by his lucid teaching. As a member of the Academy of Medicine ever since 1821, the year of its foundation by Louis XVIII., M. Adelon entered warmly into its debates, and during the years 1826, 1827, 1828, and 1829, filled the office of annual secretary, and in 1831 that of president. A great work on Medical Jurisprudence, for which, ever since his entry into the Faculty, he had been collecting materials, has unfortunately remained unfinished, and his most important publication is one that was written in early life, on the Physiology of Man, and which, although now somewhat out of date, and distanced by modern discovery, still holds its place amongst the standard works of the time in which it appeared.

An Imperial decree, recently promulgated, orders that from the 1st of next November, all pupils who are candidates for the degree of doctor, or the title of "officier de santé," shall have completed two years of attendance on hospital practice. The French press, in general, highly approves of this modification in the curriculum, which will virtually increase to six years the whole period of study; and the *Journal des Connaissances Médicales* makes the sensible remark that the present would be an excellent opportunity for abolishing the inferior grade of "officier de santé." "There are," it observes, "no second-class patients, and should consequently, in a legal sense, be no second class doctors. The life of the labourer—his arms—are just as indispensable to him as to any richer man. Incompetent advice may soon convert a simple indisposition into a grave malady. . . . . By increasing the amount of instruction there would be no doubt fewer medical men, but there would be good ones only, and families would no longer be liable to launch their children into a profession which, apart from humbug and charlatanism, cannot lead rapidly to fortune."

The same paper contains a document which cannot be made too public. It contains the medical vindication of a martyr, and runs thus:—"History always exposes sooner or later acts of cowardice and corruption. Dr. Cherean publishes in his history of the Royal Physicians of France, the deposition of Guillaume de la Chambre, extracted from the work of M. Jules Guicherat, in connexion with the odious trial of which Joan of Arc was the victim. It devolved upon Guillaume de la Chambre as Court physician, and in consequence of the special order of the King, to examine *secundum artem medicinæ* the person of the Maid of Orleans, then imprisoned in the Castle o Rouen. He styles Joan a 'Bona juvenis, justè et sanctè ambulans cum Deo,' and adds that she was an 'incorrupta virgo et multum stricta.' On another occasion the Cardinal of England (Winchester most probably) and the Earl of Warwick sent for him, and ordered a second inspection of the accused maiden, who had again fallen ill in prison. The examination was conducted in the presence of De la Chambre's colleague in medicine, Guillaume Desjardins, and with the same positive results as to her chastity. On this occasion Joan was restored to health by a bleeding, but relapsed again in consequence of the slanderous accusations of a certain Jean d'Estiveto, who called her a 'putana' and a 'paillarda,' (synonyms for 'social evil'). Our *confrère* Guillaume de la Chambre relates that he was present at the execution of the unhappy 'pucelle,' and does not hesitate to throw the odium of this iniquitous condemnation on Pierre Cauchon, the Bishop of Beauvais, and seems very anxious to free himself from any suspicion of participation; it is clear that he is uncomfortable even at his indirect connexion with the trial."

By the Life of M. de Cavour, which is shortly to appear, all doubt seems to be cleared up as to the fact that over-bleeding was mainly concerned in the cause of death; and that, had nature been aided and not starved out, the fatal termination might have been averted.

Dr. Pétrequin, one of the professors at the Medical School of Lyons, recommends very highly the use of the alkaline lactates in functional diseases of the digestive organs. The kind of dyspepsia in which these medicaments (the lactates of magnesia and soda) seem to have been most useful is the atonic form, in which digestion is slowly performed from a deficient secretion of gastric juice. "The indication is therefore," says Dr. Pétrequin, in his pamphlet, "to excite and increase the gastric secretion; and that alkalies do possess this property we have learnt from M. Claude Bernard's experiments." [One of M. Bernard's experiments was as follows:—He gave to two dogs an equal portion of meat, one of the portions containing a certain quantity of bicarbonate of soda. On killing the two animals simultaneously, and examining the contents of their stomachs, the process of digestion in the dog to which the soda had been administered was found far more advanced than was the case with the other]. In addition to the property of stimulating the stomach and increasing the secretion of gastric juice (common to all alkalies) the lactates have, moreover, a special property, that of furnishing to the gastric fluid the organic acid peculiar to it—namely, lactic acid. In aggravated cases Dr. Pétrequin advises the addition of a certain quantity of pepsine to the sodiac and magnesian lactates, as productive of marked increase in their beneficial action.

M. Piorry protested on Tuesday last, at the Academy of Medicine, against the conclusions of M. Trousseau's Report on exophthalmic goitre. He disputes the right of the latter to create a special place in the nosological vocabulary for the "maladie de Graves." The condition described by MM. Aran, Trousseau, Hiffelsheim, &c., is, he maintains, the natural consequence of the influence exercised by a goitrous thyroid body upon neighbouring organs, and is principally effected by the arrest of the circulation in the large veins, and by the production of "hæmostasies or stasic congestions" in different portions of the body—the "hæmostasy" fully accounting for merely the palpitations of the heart, and the various functional and organic changes so constantly remarked.

Paris, July 29th, 1862.

Parliamentary Intelligence.

HOUSE OF LORDS.

WEDNESDAY, JULY 30TH.

THE Lunatics Law Amendment Bill was read a second time.

JURIES BILL.

The Commons' reasons for disagreeing with the Lords' amendments to this Bill were considered, and it was resolved, on the motion of Lord WENSLEYDALE, to insist upon the amendment exempting pharmaceutical chemists from service on juries.

HOUSE OF COMMONS.

WEDNESDAY, JULY 30TH.

The Council of Medical Education Bill was read a third time and passed.

THE VACCINATION ACT.

Mr. H. B. SHERIDAN asked the Vice-President of the Committee of Council whether it was the intention of the Lords of Privy Council, in consequence of the way in which the compulsory Vaccination Act had worked, to permit gentlemen who had the diploma of the Royal College of Surgeons, and who had also undergone an examination in vaccination, and had obtained a certificate of competency in vaccination, to receive the appointment of public vaccinator, wherever boards of guardians were disposed to make the appointment under such qualifications; and whether the Privy Council had not been made acquainted with the apparent necessity for some relaxation of the regulations with reference to the present mode of appointing public vaccinators.

Mr. LOWE, in reply, stated that there was no intention to relax the present regulations on the subject.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen passed the Preliminary Examination in the subjects of General Education on the 26th ult.:—

Allen, Charles Bracebridge, Dartmouth-street, Westminster.
Beckingsale, Edgar William, Newport, Isle of Wight.
Fairbank, Frederick Royston, Elborow-street, Rugby.
Hatherly, Henry Reginald, Westminster Hospital.
Loy, Thomas Richardson, Havering, near Romford.
Sharp, David, London-road, St. John's wood.
Wadsworth, Godfrey Bingley, University College.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 29th ult.:—

Coles, Robert William, Staleybridge, Cheshire.
Gambler, Thomas, Canterbury.
Heaps, John, Beeston-hill, near Leeds.
Henry, Thomas, Wrexham.
Hubert, Theodore Kelsall, Margate-street, Beds.
Lamb, Martin Annesley, Porchester-terrace.
Land, Robert Turner, Leeds.
Lyell, Henry, Southwark.
Manchereon, Robert Samuel, Birmingham.
Manbey, George, Shepherd's-bush.
Pick, Thomas Pickering, Waterloo, near Liverpool.
Prince, John, Calcutta.
Rayner, William, Uxbridge.
Ready, William John, Dublin.
Richards, Samuel Smith Crosland, Bedford-square.
Spanton, William Dunnett, Loughborough.
Taylor, James Hudson, Barnsley.
Trimmer, Francis, Gloucester.
Watson, Thomas William Wasdale, Edmonton.
Wright, Frederick William, Launceston.

The following gentlemen were admitted Members on the 30th ult.:—

Broadbent, James Charles, Liverpool.
Davis, John Norman, Galway.
Dudley, Reginald Rabette, Whitchurch, Hants.
Eddowes, Ralph, Shrewsbury.
Evans, William Lewis, Rhayader, Radnorshire.
Fenecily, Richard, Kilkenny.
Grove, William Richard, Huntingdon.
Mahon, George Annesley Derville, Aspley, Woburn.
Hopton, Abney Charles, Judd-street, Brunswick-square.
Jessop, Henry Edward, Cheltenham.
King, Francis, Stratton, Cornwall.
King, Thomas William, Camberwell.
Mason, Samuel, Lewisham-road.
Mumford, William Lugar, Cornard-Parva, Suffolk.
Orton, Charles, March, Cambridgeshire.
Pratt, John, Sunderland.
Proctor, Peter, Leeds.
Richards, Charles, Almer, Blandford.
Watts, Horace Newbegin, Norwich.
Woods, Henry Charles, Godalming.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 24th ult.:—

Anderson, John, Green Heys, Manchester.
Elliston, William Alfred, Ipswich.
Hedges, John Alexander, Adelaide-place, Bedford.
Hodgson, Henry Frederick, Cradley Heath, Staffordshire.
Lloyd, Nathaniel Hellings, Tiverton, Devon.
Meredith, Richard, Netherton, Worcestershire.
Thompson, Ebenezer Mark, Billinghay, Lincolnshire.

The following gentlemen also on the same day passed their first examination:—

Brown, James Herbert, St. Bartholomew's Hospital.
Churchill, John Foot, Charing-cross Hospital.
Hudson, Ernest Arthur, St. Mary's Hospital.
Meadows, George F. W., Guy's Hospital.
Wright, Charles James, Leeds.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH: DOUBLE QUALIFICATION.—The following gentlemen have passed their First Professional Examinations during the July sittings of the Examiners:—

Dawson, Smith Houston, Demerara.
Dunn, Samuel J., Co. Tyrone.
Kennedy, Wm. J., Londonderry.
Lloyd, Geo. R., Co. Tipperary.
Welsh, Chas. J., Northampton.

The following gentleman passed his First Professional Examination in April:—

Hunter, James, Ayrshire.

The following gentlemen have passed their Final Examinations, and been admitted L.R.C.P.E. and L.R.C.S.E.:—

Austin, Frederick John, Limerick.
Black, James Watt, Banffshire.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen have passed their First Professional Examinations during the July sittings of the Examiners:—

Allison, Alexander, Strathaven.
Bell, A. Montgomerie, Edinburgh.
Buckley, John, Cork.
Cameron, Lewis, Moray shire.
Duncan, Robert M'K., Dumfries.
Erskine, William, Fifeshire.
Godfrey, James, Glasgow.
Goodall, Alexander, Fifeshire.
Harden, H. Fred., Weymouth.
Hughes, David Erskine, Edinburgh.
Lyon, James G., Forfar.
M'Alman, James R., New Brunswick.
Maxham, John W., Quebec.
Mercer, N. G., Argyllshire.
M'Laren, Roderick, Dumfries.
Montizambert, Frederick, Quebec.
Thin, Robert, Kirconquhar.
Veitch, Andrew, Edinburgh.
Wright, Robert, Edinburgh.

The following gentlemen have passed their Final Examinations, and obtained the diploma of the College:—

Allen, Patrick Macdonald, Arbroath.
Ambrose, John Daly, Co. Limerick.
Brebner, Alexander, Alnwick.
Breen, Michael, Co. Clare.
Dawson, Wm. Grendale, Preston.
Dewar, James, Edinburgh.
Donovan, Daniel, Skibbereen.
Dunbar, Frederick Reisch, Cork.
Duncan, John, Edinburgh.
Hearder, Geo. Jonathan, Plymouth.
Hope, James Sommerville, Tasmania.
Houston, Patrick C., Morayshire.
MacIver, Jas. Robertson, Ross-shire.
Macnair, Robert, Paisley.
Reid, Arthur Grant, Fochabers.
Ross, Wm. Geo., Bury St. Edmund's.
Smith, J. G., Kirkcudbrightshire.
Smith, James, Dumfriesshire.
Thomson, Wm., Ballynahinch.
Todd, John, Tyrone.
Veale, Richard Sobey, Cornwall.
Welsh, John Thomson, Edinburgh.

THE CLAYTON TUNNEL ACCIDENT.—The total cost to the Brighton Railway Company, in consequence of this lamentable catastrophe, amounts to about £24,000.

CONSUMPTION.—One of the Arabic names for consumption is *meurdh el abid*, or the slave's disease, from the frequency with which it attacks the negroes.

OBSERVATORY AT PEKIN.—A magnetic and meteorological observatory has been established by the Russian Government at Pekin.

THE STATUE OF LAOCOON, so celebrated for its fine illustrations of muscular action, has been satisfactorily described in a monograph by Dr. Wilhelm Henke, prosector at the Marburg University.

TESTIMONIAL.—The sum of £50 and a piece of plate were presented to Mr. J. Meaburn Bright upon the occasion of his recent retirement from the office of Resident Medical Officer of the Guildford and West Surrey Dispensary.

CORONERS' INQUESTS.—There were last year 21,038 coroners' inquests held in England and Wales, of which 14,711 were on males, and 6327 on females. The cost of the inquests was £65,299 15s.

HEALTH OF INDIA.—Cholera of a virulent type is raging at Hyderabad and Secunderabad, Deccan. The health of the town and island of Bombay is good, and there has been about twenty-five inches of rain—the third part of a good annual fall.

HANDSOME DONATION.—The Society of Foresters, at their annual fête, held this year at Chiswick House by the kind permission of the Countess of Granville, collected the sum of £150, which they generously presented to the West London Hospital.

THE NEW PHARMACOPŒIA.—At the request of Sir George Grey, the three Colleges of Physicians of London, Edinburgh, and Dublin have agreed that their respective Pharmacopœias should be superseded by the new Pharmacopœia about to be published by the Medical Council.

TERMINATION OF THE SUMMER SESSION.—The summer lectures have now ended, and the hospitals are almost wholly bare of students. In the greater number the charge of the wards has already been transferred for the next two months to the assistant physicians and surgeons, who have now to perform double duty in the absence of their seniors.

COLLEGE OF DENTISTS.—The members of this College, in order to promote a friendly feeling amongst their professional brethren from the provinces and abroad now visiting London during the Exhibition, invited those gentlemen to a dinner, which took place on Wednesday, the 23rd ult., at the Freemasons' Hall, Great Queen-street.

A CURIOUS EPIDEMIC is raging in the south, near Toulon. The entire crop of tomatoes has been destroyed in the course of a few days by a disease which kills the plant in a few hours, an instantaneous putrefaction taking place which produces considerable quantities of prussic acid. Some growers are said to have lost more than 3000 f. in one night.

PAUPER LUNATIC ASYLUM FOR THE CITY OF LONDON.—The ceremony of laying the foundation stone of the asylum to be erected by the Corporation of London for the lunatic poor of the City took place on Tuesday last at Stone, near Dartford, in the presence of a large number of persons, including several members of the civic body.

JERSEY MEDICAL AND SURGICAL SOCIETY.—The members of this Society held their annual general meeting on the 25th ult. at their rooms in Bath-street, and elected the following office bearers for the ensuing year:—*President:* Dr. Charles Vandin.—*Vice-Presidents:* Dr. Alex. Leigh and Dr. M. Blood. *Treasurer:* Dr. Kitchener.—*Secretary:* Dr. H. J. Hirschberg. *Council:* Drs. Joseph Dickson, John Fixott, Alex. Low, John Le Cronier, and Alfred Godfray.

CHARING-CROSS HOSPITAL.—The annual distribution of prizes took place on Tuesday, July 22nd. The following gentlemen were the successful candidates:—*Anatomy:* Silver medal, Mr. William Carter. First certificate, Mr. Churchill; second ditto, Mr. William Hayden; third ditto, Mr. T. C. Wigg; fourth ditto, Mr. W. H. Cope. Bronze medal, Mr. William

Burt Shorto. Certificate, Mr. Henry Willson. — *Chemistry:* Silver medal, Mr. W. B. Shorto. Certificate, Mr. Charles Knight. —*Surgery:* Silver medal, Mr. J. H. Simpson. Certificates and books, Messrs. Fisher and Badcock. Bronze medal, Mr. H. Willson.—*Physiology:* Silver medal, Mr. Wm. Carter. Bronze medal, Mr. W. B. Shorto. — *Medicine:* Silver medal, Mr. J. H. Simpson. Certificate, Mr. T. C. Wigg. — *Materia Medica:* Silver medal, Mr. J. H. Simpson. Certificate, Mr. Churchill.—*Botany:* Silver medal, Mr. Wm. Carter. Certificate, Mr. Churchill. — *Midwifery:* Silver medal, Mr. Luke Fisher. First certificate, Mr. F. Skegg; second ditto, Mr. Badcock.—*Forensic Medicine:* Silver medal, Mr. L. C. Badcock. —*Practical Chemistry:* First certificate, Mr. Simpson; second ditto, Mr. Churchill.

A SEMI-CENTENARY ANNIVERSARY OF A DOCTOR'S DEGREE.—Dr. Ehrmann, Dean of the Faculty of Strasburg, obtained his degree in 1812, and has since attained the highest professional honours. Besides eminent talents, Dr. Ehrmann possesses the qualities which secure the attachment and esteem of colleagues and pupils; we therefore find that the anniversary was celebrated in a most touching manner. The pupils of the medical school presented the Dean with a very handsome testimonial on the occasion; and the professors and leading medical men of the city gave him a dinner, on which occasion the most eloquent and flattering speeches were delivered.

UNWHOLESOME FISH IN FRANCE.—It has been noticed for some years past at Rouen that the fish offered for sale was not only of an inferior quality, but had given rise in several instances to very severe symptoms among those who used it for food. The evil has become so notorious, that the authorities requested the board of health of the locality to make inquiries; the board has therefore appointed a committee, who will proceed to Dieppe to investigate the matter. We should add that it has been lately noticed that the fishermen on the coasts of both France and England do not, as heretofore, steep their nets in water strongly impregnated with tan, but in a solution of sulphate of copper.

CARBON AND ITS COMPOUNDS.—This was the subject of an interesting lecture delivered by Mr. A. P. Tarner at the Marylebone Literary and Scientific Institution on the 21st inst. The part that carbon plays on, above, and beneath the earth was especially considered. The lecture was illustrated by a large collection of specimens, by diagrams, and by a series of remarkably successful experiments. Considering that this was the first occasion that the lecturer had addressed a large public audience, his discourse from first to last was delivered with that self-possession and ease which are commonly only witnessed in the practised lecturer.

THE FORFARSHIRE MEDICAL ASSOCIATION.—The fourth annual meeting of this Association was held at Brechin, on the 23rd ult., Dr. Guthrie in the chair. Thirty medical gentlemen were present. After the usual preliminary business a long and interesting paper was read by Dr. Guthrie, sen., on "Ulcerative Diseases of the Throat," being an account of an epidemic which occurred in that neighbourhood chiefly during the years 1819 and 1820. This paper raised the question as to the relation this epidemic bore to the "diphtheria" of the present day.

At the dinner the chair was again taken by Dr. Guthrie, supported right and left by Dr. Seller and Dr. Gairdner of Edinburgh, who were present as guests.

The Chairman, in proposing the health of the guests, remarked on the pleasures and advantages arising from the intercourse between town and country practitioners. While the former were fitted to interest and enlighten, by communicating all the more recent discoveries in the science and art of medicine, the latter were ready to impart something of at least equal importance from the store of their ever-accumulating experience.

Dr. Seller, in an able reply, expatiating on the advantages all received from these *réunions*, said they promoted the cultivation of good fellowship and kindly feelings, and, which is of much higher importance, a habit of putting a favourable construction on the acts of our brethren. Toast, "Success to the Forfarshire Medical Association."

Dr. Laurence, in a speech remarkable for its eloquence and good feeling, proposed the health of the retiring President of the Association, Dr. Guthrie; and said, a reputation which had stood the test of half a century, and received the willing homage of all, must contain within it elements of genuine excellence, and rest on a basis of solid worth. All knew his keen and searching observation, his patient inquiry, his shrewd sagacity, and clear, cool, and cautious judgment. He presented a happy union of conservatism and reform, being neither disposed to ignore the sage lessons of experience, nor to refuse to follow the ever-brightening lights of science.

This was followed by the hearty applause of the company, and a brief reply by Dr. Guthrie.

Dr. Christie gave "The Infirmaries of Forfarshire."

Dr. Nimmo, who has for thirty-five years been connected with the Dundee Infirmary, replied, and bore testimony to the merits of its medical staff.

Dr. Johnson, in a speech containing practical suggestions of importance, gave "Our National Medical Schools."

Dr. Gairdner replied, and, after alluding to the cordiality of the meeting, referred to the full medical staffs possessed by metropolitan hospitals; he nevertheless thought that in the smaller provincial hospitals much valuable clinical instruction might be given to groups of ten or twelve pupils, and thus increase their opportunities of acquiring practical experience.

After several other toasts, which elicited much that was valuable in the speeches of many of the members, the company separated, refreshed and gratified by the happy and profitable intercourse they had enjoyed.

The next annual meeting will be held at Forfar, under the presidency of Dr. Steele.

THE METRICAL SYSTEM.—The Select Committee on Weights and Measures, presided over by Mr. William Ewart, and of which Mr. Cobden has been an active member, have arrived at an almost unanimous conclusion, that the best course to adopt is gradually to introduce the metrical or decimal system. They think the first step should be simply to render it permissible in this country.

RUBIDIUM.—The rare alkaline metal discovered by M. Bunsen in certain mineral waters by the spectrum analysis, has been recently found by Grandeau in the ashes of beet-root, tobacco, coffee, tea, and grapes. The spectrum of tobacco gave bands characteristic of lime, lithium, potassium, and rubidium. These facts show that rubidium is one of the most widely diffused bodies in nature, since vegetables of the most diverse kinds are found to take it up from the soil. This opens a field of research in vegetable chemistry into which M. Grandeau proposes to enter.

NARROW ESCAPE FROM DROWNING.—On Sunday morning last, a lad named G. Spanner, residing in Charles-street, Stepney, in attempting to swim across the new bathing-lake, Victoria-park, lost confidence, and sank in about six feet of water. He was got out and conveyed in a state of insensibility to the hut of Mr. Woodbridge, who, by using the means recommended by the late Dr. Marshall Hall, succeeded in restoring animation in about fifteen minutes.—*Daily Telegraph.*

A CASE OF HARD SWEARING.—G. N. SMITH v. J. BEARDS.—A case was tried by jury in the Wolverhampton County Court recently, which exhibited a deplorable amount of cross-swearing that is seldom met with, even in minor courts of justice. The case had previously been before A. M. Skinner, Esq., Q.C., the judge, on a common summons; but his Honour found the case so extremely contradictory that he preferred to have the assistance of a jury. A jury was therefore called for, and the proceedings again taken into court. Mr. James Walker appeared for the plaintiff, and Mr. Stirk conducted the case for the defendant. The plaintiff, Dr. G. N. Smith, sued the defendant, a locksmith in St. Mark-street, for a sum of £2 6s. 6d. for medicine and attendance on defendant's wife, in the months of October, 1860, and March, 1861. For the plaintiff the day-book was produced, from which Dr. Smith and his assistant proved their visits; the entries were made invariably on the day of the visit, and the book did not present the slightest irregularity. Both plaintiff and his assistant were well known to the defendant's family, so that it was impossible to have made a mistake in the name. The illness in October was of two or three weeks' duration; in fact, Mrs. Beards was so poorly that she had to be confined to her bed; the complaint she was suffering from was an inflammation. Plaintiff and his witness identified the defendant and his friends in court, and the assistant swore to one of them having on one occasion lighted him up stairs. On the other hand, the defendant, his sister, his brother, and his wife, all swore that the wife had never had a day's illness since her last confinement in 1858. On that occasion Dr. Smith attended her, and treated her for inflammation; but never in the whole course of her life had she been attended by Dr. Smith's assistant. After a brief deliberation the jury returned a verdict for the plaintiff for the amount claimed. At the conclusion of the case the judge remarked that it was a peculiar case, but Wolverhampton seemed to have a specialty for hard swearing. He recollected having had a

case equally singular, in which a surgeon sued a man for the torturous process of cupping, and, as in this instance, the defendant denied the affair altogether. Surgeons, he jocularly observed, should ear-mark their patients—privately mark them, so that they might know them again.

SPINAL INFLUENCE ON THE ACTION OF THE HEART.—M. Moleschott, professor of physiology at Turin, has communicated to the Academy of Sciences of that city the result of experiments carried on by M. Hussehmidt and himself, to ascertain the influence of the medulla oblongata and the medulla spinalis on the action of the heart. A very slight irritation of either medulla increases the number of pulsations of the heart, whilst irritation of a more considerable kind diminishes the pulsations. Irritation of the medulla oblongata is conveyed to the heart by the vagi only; for no result is obtained when the section of these nerves has taken place, and the sympathetic nerves have not been touched. M. Moleschott finds that irritation of the spinal marrow acts directly upon the heart by means of the sympathetic, and in virtue of a simple reflex action of the vagi. He also thinks that no centre of obstruction exists respecting the movements *of* the heart, nor is there such a thing as an obstructing nerve touching these same movements. This latter theory had already been developed and commented upon by M. Schiff and by M. Moleschott himself.

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, JULY 26TH.—Eleven hundred and thirty-seven deaths from all causes were registered in London in the week that ended last Saturday. The average number of deaths in the weeks of 1852-61 that correspond with last week is found, with correction for population, to be 1242. The deaths last week were therefore less by a hundred than the number that would have been recorded under the average rate of mortality. The births in last week exceeded the deaths in the same time by 621. Typhus was returned in 74 cases, 32 of which were described as "typhus," 18 as "typhoid fever," and the remainder as "gastric fever," "low fever," &c. Five deaths from typhus occurred in the sub-district of St. Margaret, Westminster; 13 were returned by the London Fever Hospital. Measles and scarlatina were returned in almost equal numbers; the former 49, the latter 48. About half of the deaths from measles occurred in the East districts, chiefly Haggerstone, where 7 were recorded. Scarlatina prevails in Kensington, 5 fatal cases of it having been registered in the Town sub-district. Diarrhœa exhibited a decided increase last week; the deaths from it rose from 39 to 68, besides which there were 9 from English cholera. Of the 77 deaths referred to the two heads "diarrhœa," and "cholera," 67 occurred to children, chiefly infants.

The births were—boys, 887; girls, 871; total, 1758.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·921 in. The mean daily reading was above 30 in. on two days of the week. The reading rose to 30·10 in. on Monday, and fell to 29·77 in. on Wednesday. The mean temperature of the air in the week was 60·1°, which is 1·5° below the average in the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was below the average till Friday. The lowest night temperature was 44·6° on Tuesday. The highest day temperature was 79° on Saturday. The range of the thermometer in the week was 34·4°. The mean daily range was 20·4°. The difference between the mean dew-point temperature and air temperature was 6·8°. The mean degree of humidity of the air was 80, complete saturation being represented by 100. On Wednesday the humidity was 98; on Saturday it fell to 73. The wind was generally in the south-west and west. The amount of rain did not exceed 0·11 in., which was measured on Wednesday. The thermometer in the sun rose to 125·6° on Saturday. The mean of the highest temperatures of the water of the Thames was 64·3°; that of the lowest was 62·1°.

MEDICAL VACANCIES.

THERE is a vacancy for a Resident Surgeon at the Birmingham Lying-in Hospital and Dispensary for the Diseases of Women and Children.

A Medical Officer is required for the Kirton District of the Boston Union.

MEDICAL APPOINTMENTS.

MR. TREVAN has been appointed Demonstrator of Anatomy at the Westminster Hospital.

Mr. J. T. Forbes Firth has been appointed Surgeon and Public Vaccinator for the East District of Rotherhithe.

Dr. John C. Ferguson, Professor of Practical Medicine at Queen's College, Belfast, Examiner in Medicine at the Queen's University, Ireland, and Physician to the General Hospital, Belfast has been elected President of the Ulster Medical Society—(a Society recently formed by the union of the Belfast Medical Society with the Belfast Clinical and Pathological Society).

Dr. Samuel Browne, Surgeon, R.N., and Surgeon to the Belfast General Hospital and to the Ophthalmic Institution, and Dr. Thomas K. Wheeler, have been elected Vice-Presidents (Town), and Dr. Wm. Scott and Dr. Henry Graves, Vice-Presidents (Country).

Dr. Walter Somerville has been appointed successor to the Hon. John Young, M.D., of Belize, British Honduras.

Mr. Edward T. Newbold has been elected Medical Officer and Public Vaccinator for the Macclesfield District, and the Workhouse and Fever Hospital, of the Macclesfield Union, Cheshire, vice Mr. Wm. Losey, resigned.

Dr. Gustavus C. P. Murray has been appointed a Physician-Accoucheur to the St. George's and St. James's Dispensary, King-street, Regent-street, vice Dr. Wm. Hamilton Roe, resigned; and Mr. Wm. Frederic Teevan has been appointed a Surgeon, vice Mr. Christopher Heath, resigned.

Mr. Walter Jeffery Potts has been elected Medical Officer and Public Vaccinator for No. 5 District of the East Grinstead Union, Sussex, vice Dr. Mungo Park, resigned.

Mr. John Lambert has been appointed Dispenser to the Royal Portsmouth, Portsea, and Gosport Hospital, Portsmouth, vice Mr. Thomas David Bennett, resigned.

Births, Marriages, and Deaths.

BIRTHS.

On the 5th of June, at Kathmandhu, Nepaul, the wife of Dr. Oldfield, of a son.

On the 15th ult. at the Royal Naval Hospital, Malta, the wife of John Page Burke, M.D., of a daughter.

On the 27th ult., at Oxford, the wife of Gilbert W. Child, M.D., of a daughter.

MARRIAGES.

On the 1st of May, at the residence of the bride's father, George Sargent Jakins, Esq., second son of I. N. Jakins, Esq., M.R.C.S., of Osnaburgh-street, Regent's-park, to Eliza, youngest daughter of the Rev. John Hobbs, of Auckland, New Zealand.

On the 24th ult., at St. Barnabas Church, Homerton, George Sykes, M.D., Surgeon to the Queen's Own Light Infantry Militia, to Sarah Anne, eldest daughter of George Chambers, Esq., of Park House, Downs Park-road, Lower Clapton.

On the 24th ult., at St. Mary's, Reading, George May, jun., B.A., M.B., to Mary Sophia Georgiana, daughter of Wm. Robinson, Esq., of Oxford Lodge, Reading.

On the 24th ult., at the Parish Church, Wiscombe, Bath, C. A. Homfray, Esq., M.R.C.S., of Tredegar, Monmouthshire, to Anna Maria, second daughter of the late F. O. B. Lewis, Esq., Surgeon, of Cromamman, Llanelly, Carmarthenshire.

On the 29th ult., at the Parish Church, St. George's, Hanover-square, the Rev. Samuel Christopher Morgan, Curate of Newland, Gloucestershire, to Sophia Janet, eldest daughter of C. J. B. Williams, M.D., F.R.S., of Upper Brook-street.

On the 29th ult., at Albyn-place, Aberdeen, Wm. Keith, M.D., of Easter Muchalls, Kincardineshire, to Isabella Fiskin, relict of Wm. Williamson, Esq., late of Broadalbane, Victoria, Australia.

On the 29th ult., at St. Saviour's, Paddington, Alex. Geo. Davey, M.D., of Ryde, Isle of Wight, second son of Richard Gibbon Davey, Esq., M.R.C.S., of Walmer, to Penelope Susan, eldest daughter of the late John Robinson, Esq., of The Firs, Dudley, Worcestershire.

DEATHS.

On the 13th ult., at Brunston House, Braunston, Rugby, Matthew French Wagstaffe, Esq., M.R.C.S., of Walcot-place, Kennington, aged 59.

On the 21st ult., at Bath, Caroline Anne Kane, wife of Wm. Kane, M.D., youngest daughter of Brigadier-General C. Dallas, and granddaughter of Geo. Cockburn Haldane, Esq., of Gleneagles, Perthshire.

On the 22nd ult., at Burton-upon-Stather, Henry John Waterland, Esq., M.R.C.S., late of Kirton-in-Lindsey, aged 38.

On the 24th ult., at Limehouse, Ann, the wife of W. S. Cumming, Esq., M.R.C.S., aged 68.

On the 25th ult., at Portland House, Cheltenham (the residence of his father, Thomas Smith, M.D.), Thomas Johnson Smith, M.D., aged 24.

On the 26th ult., Charlotte Susanna, widow of the late Chas. Macklin, Esq., Surgeon, of Buntingford, Herts, aged 73.

BOOKS ETC. RECEIVED.

Pécholier sur les Illusions et Réalités de la Thérapeutique.
Mr. Smee on Debility.
Dr. Hood's Statistics of Insanity.
Mr. Scott's Handbook of Volumetrical Analysis.
Prison Life, by a Prison Matron.
Dr. Cutler's Notes on Spa.
Mr. Sinnett on South Australia.
Mr. Bigg on Deformities.
Dr. Davy on Army Diseases.
Mr. Simmonds on Waste Products and Undeveloped Substances.
Catalogue des Produits des Colonies Françaises.
Journal of Mental Science.
Bombay Medical Transactions.
Madras Quarterly Journal.

Medical Diary of the Week.

MONDAY, Aug. 4	St. Mark's Hospital for Fistula and other Diseases of the Rectum.—Operations, 1½ P.M. Metropolitan Free Hospital.—Operations, 2 P.M.
TUESDAY, Aug. 5	Guy's Hospital.—Operations, 1½ P.M. Westminster Hospital.—Operations, 2 P.M.
WEDNESDAY, Aug. 6	Middlesex Hospital.—Operations, 1 P.M. St. Mark's Hospital.—Operations, 1 P.M. University College Hospital.—Operations, 2 P.M. Royal Orthopædic Hospital.—Operations, 2 P.M.
THURSDAY, Aug. 7	St. George's Hospital.—Operations, 1 P.M. Central London Ophthalmic Hospital.—Operations, 1 P.M. London Hospital.—Operations, 1½ P.M. Royal Free Hospital.—Operations, 1½ P.M. Great Northern Hospital, King's Cross.—Operations, 2 P.M. London Surgical Home.—Operations, 2 P.M. West-London Hospital.—Operations, 2 P.M.
FRIDAY, Aug. 8	Westminster Ophthalmic Hospital.—Operations, 1½ P.M.
SATURDAY, Aug. 9	St. Thomas's Hospital.—Operations, 1 P.M. St. Bartholomew's Hospital.—Operations, 1½ P.M. King's College Hospital.—Operations, 1½ P.M. Charing-Cross Hospital.—Operations, 2 P.M.

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THE LANCET may be obtained from every respectable Bookseller or Newsman in the World.

To Correspondents.

P. H. S.—He must attend at the workhouse daily. As regards the hour for visit, we believe the guardians cannot compel a medical officer to attend at any particular hour daily, and that they only possess the power of enforcing that the visits shall be held between such and such a time, as, for instance, between the hours of eight A.M. and six P.M. No arbitrary rule compelling the medical officer to attend at a particular hour, in our opinion, would be confirmed by the Poor-law Board, to whom we would advise an appeal in the event of any attempt being made to illegally coerce a Poor-law surgeon.

Doctoria.—It will be impossible to give a satisfactory answer to such a question upon a mere written description of the case.

OPEN AIR COAL-PLATES A REMEDY FOR UNWHOLESOME VAULTS.

To the Editor of THE LANCET.

SIR,—Will you kindly point out to house occupiers how easily and simply thousands of damp, musty, and dark underground coal-cellars may be rendered sweet and dry by drilling a few large holes in the iron coal-plate (costing a mere trifle), thus admitting light and pure air, and allowing an outer vent or escape for the unwholesome effluvia and stinks, which very often penetrate into the dwelling house, to the injury of the health of its inmates.

I am, Sir, yours obliged,

July, 1862. PURE AIR AND VENTILATION.

Student.—1. The beautiful colours known as mauve and magenta are fundamentally derived from coal-tar oil. Our correspondent should read a lecture upon this matter lately delivered by Professor Hofmann at the Royal Institution of Great Britain.—2. Aniline has been used in the treatment of chorea and some other nervous affections.

John Jones cannot do better than refer to the subjects mentioned in the last edition of the "Encyclopædia Britannica."

Mr. Wm. Gray.—The letter is not fit for publication.

MEDICAL TITLES.

To the Editor of THE LANCET.

SIR,—I have been a reader of THE LANCET for more than thirty years, and am sorry that I am now compelled to differ from it on the question of Medical Titles. The Medical Council propose to alter Clause 40 of the Medical Act, by making it more stringent with regard to the assumption of titles by those who are registered using or calling themselves by any other than they are registered as. This, with all due deference for your opinion, I consider a most healthy part of the amended clause as proposed by the Medical Council, who appear to me to have based it upon the principle of abstract right, reason, and justice, which are inalienably the rights of every member of the profession. For why should a member of the College of Surgeons call himself an apothecary when he has not passed any examination as such? Again, why should a Beautiste of the Apothecaries' Company call himself a surgeon when he has never proved himself to be one by any examination in surgery? Again, why should those persons who hold foreign diplomas as Doctors of Medicine, without ever having passed any examination to prove that they are worthy of it, be allowed to continue to call themselves what really and truly in common honesty they are not? They are not allowed to register as such; then why should they stand side by side with the educated men who have gone through a searching examination and proved their competency? It is an insult to common sense that they should be allowed to do so. I hope the Medical Council will persevere to carry this part of the clause, and let it go before the Legislature with their prescriptive authority, as tested by having viewed it in all its bearings. I am sure the Legislature will attend to it, and carry it out, as it reverts to the first principles of natural justice towards all parties. It is the only test of status, worth, and merit; for it is an outrageous scandal upon the profession, as well as being an outrage upon the public, in leading it to believe that they are what they are not, and which they have neither the moral or legal right to assume. Why should they be allowed to deceive the public by sailing or rather practising under false colours? It is an unblushing and defiant piece of effrontery for any man to call himself that which he is not. It is neither more nor less than empty swagger and downright falsehood. There should be a unanimity of expression and feeling, and an *esprit de corps* on the part of the profession to prevent any person, whether he be a member of the healing art or not, from taking unto himself a position to which he is not entitled, and which he should be prohibited from occupying by the stern and inflexible interference of the law. It is an injury to his more favoured brethren, who have gone through the ordeal of the various examinations. Why should a man attempt to ally himself to the higher branches of the profession when he does not legitimately belong to them? To my mind it is mere idle sophistry to reason to the contrary. Indeed no system of Freemasonry, ever so closely united and cemented together in common sympathies and common objects, should more fervently unite the profession in one solid, united compactness than this question of the assumption of titles. It is an emergency in which the honour of the profession entirely rests; for no member of the profession should be allowed to call himself by any other title than that under which he is registered. Why should the lowest titles or the feeblest capacities attempt to vie with the higher titles and callings of the profession of medicine? There is not, in my opinion, even an exceptional argument to be held in their favour. Consequently they should not be allowed to indulge in the assumption of titles at the expense of those who have worked hard to gain their honours, for which they have spent much time and a great deal of money. Having done so, is it right that these honours should be filched from them by those who never underwent an examination for them? I emphatically say, No. As such, there ought to be one spontaneous burst of indignant feeling on the part of the profession against this base and wicked assumption of titles. It should be untiring and unremitting. They have been silent over this question, or rather overlooked it, too long. They should at once decide that the clause should no longer be one of an unlimited, undefined, and of a doubtful character, but one which should not admit of the slightest or remotest difficulty in understanding its true and legitimate boundary marks, by which the public should be guided. It is nothing more or less than what the present situation of the profession loudly calls for, and the action which the Medical Council propose to take justifies itself by its impartiality. They have raised the trumpet of justice to their lips, and blown a blast which I hope will resound through the length and breadth of the land, and enter the hearts of my brethren in all its fulness and intensity. It would be reckless on our parts to thus lose the chance of rectifying a great, a glaring, and paramount wrong.

I write this with the view of drawing forth the opinions of others on this question of titles; and as I like to call "a spade a spade," I shall, with your permission, sign myself,

Your obedient servant,

July, 1862. JOHN BULL.

A Young Microscopist should go through the several numbers of the *Popular Science Review*, in which the history of the Rotifera, or wheel animalcules, is fully treated of by Mr. Gosse.

A Subscriber, (Bath.)—No demonstrations on the subject are now going on in London.

Quæro shall receive an answer next week.

VENOMOUS CATERPILLARS.

To the Editor of THE LANCET.

SIR,—The communications on the above subject by Mr. Geo. Mason, of Deal, (THE LANCET, July 5th,) and by "R. W. F.," on the 19th, have been interesting to me, inasmuch as a severe case of urticaria occurred in my own practice some time ago from the same source.

I read a paper on the case at one of our meetings, and shall be happy to forward a copy to "R. W. F." or to any other gentleman who may be interested in the subject if he will favour me with his address.

I am, Sir, yours, &c.,

Bedford, July, 1862. T. HERBERT BARNES, M.D.

THE LATE MR. PITTARD.

We are requested by Mr. Stone, of the College of Surgeons, to announce the receipt by him of the following additional subscriptions in aid of the widow and eight children of the late Professor Pittard, of the University of Sydney —viz., Dr. Francis Bisset Hawkins, Lewell Lodge, Dorchester, £5; Professor Halford, of the University of Melbourne, £3 3s.

T.—Mr. Frederick Field has shown that bismuth is almost universally distributed in the minerals of copper containing sulphur. As to the cause of the present high price of bismuth in the market, we cannot give an opinion beyond the vague one of a deficient supply.

CONCENTRATED INFUSIONS AND DECOCTIONS.

To the Editor of THE LANCET.

SIR,—As practical pharmaceutists, permit us to offer a few remarks on the use and abuse of concentrated infusions and decoctions in reference to that portion of the article in your last number alluding to our preparations in the late Exhibition, which the writer admits are "carefully and skilfully prepared." This has been our aim for some years past, having devoted considerable time and expense to the preparation of medicines which shall represent all the active properties of the drug employed, perceiving the time had arrived when good preparations of this class were in great demand. Our daily experience proves it. Modern practitioners—nay, even those who are yet prejudiced in favour of old formulæ—are willing agents to the progress made in modern pharmacy. Take up the prescriptions of the present day; they are widely different from those of twenty years ago. There is an evident desire for medicines in a concentrated form, as "drops," tinctures, and liquors are now in request. Call these concentrated essences by what name you please; call them all liquors for the sake of uniformity: we term them fresh infusions and decoctions in a concentrated form. We say *fresh*, because we conscientiously believe they are infinitely better than those so often called "fresh." We assert that the infusions of the Pharmacopœia are seldom made twice alike, whereas concentrated ones are. We will even go so far as to assert that a "bad" concentrated infusion is better than a "stale" fresh infusion.

Extracts are remedies in a more highly concentrated form. Liquors, too, many admit, are most valuable medicines of this class. And where is the difference? We can produce the highest medical authority in stating that concentrated infusions and decoctions, *when well prepared*, are approved of and recognised, and there is a call for these preparations, not by chemists, but by practitioners; and from our experience—and we are large makers—we should say that seventy per cent. at least of medical men throughout the kingdom use concentrated infusions; and, knowing this, we should rejoice to see these and similar preparations admitted into the new Pharmacopœia, which, in our opinion, would be another step in advance of pharmaceutical science. In order to produce a good concentrated medicine, the genuine drug, the well-regulated laboratory, the *modus operandi*, and the skilled pharmaceutist, are the desiderata.

In conclusion, we beg to state that we adhere to the old fashion of preparing infusions and decoctions according to the present Pharmacopœia for our dispensing use.

We remain, Sir, yours, &c.,
Baker-street, July, 1862. CURTIS AND CO.

C. D.—Certainly not. Our views as to the effects of railway travelling have recently been fully substantiated by Mr. Adams, the engineer, in his work upon "Road and Rails."

Botanicus.—For the development of the higher forms of fungi, heat and humidity are essentially necessary; but the well-known botanist, M. Prièe, remarks that the lowest forms, as Penicillium, may be found alike on the mountains of Lapland and in the Lybian desert.

MEDICAL ASSISTANTS.

To the Editor of THE LANCET.

SIR,—Having read the letter of "Another Qualified Assistant," will you kindly allow me to make a suggestion as to the cause of, and remedy for, our unpleasant and often ambiguous position?

I think it is chiefly due to the employment of unqualified men by principals, who for cheapness or convenience enlist the services of persons very frequently having had no legal medical education, and who do not possess the least possible right to be entrusted with the lives of their fellow-creatures.

The public do not often question an assistant's qualifications, because, in case of faulty judgment or neglect, the principal is on the spot to back it up or slur it over. Medical practitioners are protected by law from the innovations of unqualified men; but there is no law to prevent such persons from acting as assistants. Hence we are often placed upon a footing with such, and, as a result, badly paid and unkindly treated.

The remedy for our evils is simple and easily applied, being only the one act of justice due from the more advanced and fortunate members of the profession to the younger and more needy. It is this: let all medical gentlemen requiring assistants only employ such as possess legal qualifications either to practise medicine or surgery, or to act as assistants.

I am, Sir, yours, &c.,
July, 1862. ONE MORE QUALIFIED ASSISTANT.

W. H. F., (Manchester.)—At the present time we do not think it advisable to publish the letter. The suggestions of our correspondent are good, and no doubt they will be acted upon at the proper time.

W. K., (Brighton.)—We shall be glad to hear further from our correspondent on the subject of his letter.

SURGEONS AND ASSISTANT-SURGEONS IN THE MERCHANT SERVICE.

To the Editor of THE LANCET.

SIR,—Please allow me, through the medium of your journal, to ask any of your readers (medical agents and others) for information respecting the way to enter the Merchant Service as assistant-surgeon, or surgeon, if assistants are not employed. I should also like to know what qualification is necessary, and what remuneration is given.

I remain, Sir, yours obediently,
July, 1862. J. C. A.

PHYSALIS ALKAKENGI.

M.D.—Darby, of Leadenhall-street, and Bullock, of Hanover-street, have the dried plant, as probably have other houses which advertise the New Remedies described in THE LANCET. Now that it is in the hands of pharmaceutists, some available preparation will be devised. They will explain to "M.D." the dose and best mode of administration.

IF *Remorse* will send his name and address, his question shall be answered privately.

ARTFUL QUACKS.

To the Editor of THE LANCET.

SIR,—Some irregular and unqualified practitioners, who dare not describe themselves on their door-plates as surgeons, adopt another method. If you will walk through some parts of London, you will notice that a notorious venereal quack has on his shop door, Mr. A. B. ——, *Surgery*. I have not seen in any of the proposed amendments to the Medical Act a clause which would meet this case though, no doubt, Mr. A. B. —— lends the ignorant public to suppose that he is a *surgeon* by the use of the word *surgery*.

I am, Sir, your obedient servant,
London, July, 1862. M.D.

Mr. W. H. Jameson.—Either of the double qualifications mentioned is sufficient.

An Old Subscriber.—The veratrum viride was obtained from T. Morson and Son, Chemists, Southampton-row, Russell-square. The dose of the tincture for an adult is eight minims every two hours, or *pro re nata*; for children, two to five minims; for infants, half to two minims. The usual dose of the tincture of the sesquichloride of iron is from twelve to thirty minims (which may be increased if necessary) two or three times a day.

FEEING NURSES.

To the Editor of THE LANCET.

SIR,—Through the medium of your invaluable journal I am anxious to direct the attention of all obstetric practitioners towards a subject which must have of en occupied the thoughts of many.

The custom of handing over part of the fee (as a *douceur*) to the nurse by the accoucheur is an old but, in my opinion, a most ridiculous and reprehensible one. What claim has the "monthly" upon the medical attendant? Like him, she is paid for her services, and, in common, far more considerably according to their relative value. Why then should a man, whose ordinary course of life is perhaps ruled by the *res angusta domi*, mulct himself or his family of his hard-won and scanty earnings for the benefit of a class about whose demerits as a rule the less that is said the better? It is true that the gift is ordinarily of small value; but to poor men even such is of consequence, and richer ones have no right to encourage a practice which presses heavily on their less favoured brethren.

Now that nurses begin to demand the favour as a right is the time to refuse it unanimously, and thus convince the public that the doctor does not either dread the criticism, need the advice, or court the recommendation of the nurse.

Yours obediently,
London, July, 1862. NEMO.

A Patient.—1. He is legally qualified.—2. He is not, we believe, now in practice.—3. Efficient advice can be obtained at any of the London or provincial hospitals.

A First-Year's Student.—The "filariæ" are microscopic parasitic worms found in the fluids of the body, as in the blood, chyle, and humours of the eye.

Dr. Henry Osborn's communication shall, if possible, appear next week.

A NEW MODE OF ACQUIRING CELEBRITY.

To the Editor of THE LANCET.

SIR,—The enclosed card is freely distributed in this neighbourhood, with a cast of the stone. It was given to me by a professional friend. If this is not advertising, pray what is?

I am, Sir, yours, &c.,
Manchester, July, 1862. A SUBSCRIBER.

"This is a model of a stone taken from W. Robinson, sen., April 13th, 1862, by W. Beever, Surgeon. Length, 2½ in.; width, 1½ in.; thickness, ¾ in.; weight, 2½ oz."

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Peacock; Dr. Radcliffe; Mr. W. Parker, Bath; Mr. Teevan; Mr. Wm. Bell, Preston, (with enclosure;) Mr. R. Griffin, Weymouth; Mr. R. Dilton; Dr. Maclagan, Cupar; Mr. Jameson, Caistor; Dr. Smith, Cheltenham; Mr. Watts, Yeovil; Mr. Phillips, Guildford, (with enclosure;) Mr. S. Davies, Pembridge; Dr. Borthwick, Dumfries; Dr. Mackinder, Gainsborough, (with enclosure;) Mr. Firth; Mr. J. King, Wincanton; Dr. T. H. Barker; Mr. Horsell, Horton; Mr. Cottingham, Minster, (with enclosure;) Dr. Corry, Belfast; Dr. Howe; Dr. Magrath, Teignmouth; Dr. Kebbell, Brighton; Dr. T. K. Chambers; Mr. Percival; Mr. Gant; Mr. Folker, Manchester; Mr. Dawson, Old Barford, (with enclosure;) Dr. Grabham, Tunbridge; Messrs. Butterfield and Co., York; Dr. Henry; Mr. Tildesley, Willenhall, (with enclosure;) Mr. Caley, (with enclosure;) Mr. Popplewell, (with enclosure;) Mr. Warren, (with enclosure;) Mr. Jakins; Mr. Black, Oban; Mr. Peirce, Weston-super-Mare, (with enclosure;) Mr. Croft, Kempsey, (with enclosure;) Mr. Evans, Crewe; Mr. Freeman, King's Sutton; An Assistant and Subscriber; Stafford General Infirmary, (with enclosure;) A Qualified Assistant; W. G.; J. C. A.; Jersey Medical and Surgical Society; J. S. R., Ben Rydding; A Subscriber; An Exeter Surgeon; Remorse; A Surgeon of Twenty-four Years' Standing; L. U. L. C.; Insero; Pure Air and Ventilation; W. B. F.; A Patient; M.D.; Nemo; North Staffordshire Medical Society; Royal College of Physicians; W. J. H.; Quebrada Mining Company; L.R.C.P.; M.D., (with enclosure;) An Unsuccessful Candidate; &c. &c.

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to find the low price at which he sells it allows the Profession to use it in common practice and public institutions, so that its extraordinary beneficial e
are enjoyed by the poorest sufferers. R. FREEMAN almost daily receives letters from members of the Profession and also the Trade, who speak highly o
CHLORODYNE. He publishes the following by permission:—
"I duly received your sample of Chlorodyne, and I liked it so well that I ordered more through my wholesale druggist. I think it *is every way as pe
any I have used*, and it has the recommendation of being cheaper."—B. J. BOULTON, M.D., Surgeon to the Horncastle Dispensary, &c., Horncastle.
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effect* in whatever case it has been administered."—C. SWABY SMITH, M.R.C.S.E., Surgeon to Berks & Hants Extension Railway Works & Pewsey Union,
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Vide "Medical Times & Gazette," Dec. 14th, 1861.